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President's Message

Society and conservation initiative need your help

It is that time of year again when our birding and social lives get busy. Many of you will be chasing the winter rarities and scouting your Christmas Count areas for that "really good bird." Seasonal parties provide an opportunity to visit family and friends as well as to make new friends.

It is also a time to consider helping the Society by recruiting new members, giving gift subscriptions to your birding friends and family members, or giving a special gift of support to the Society. Our ability to meet the objectives of the Society's charter is limited by the operating capital, and for the past two years the budget has been very tight. We have two new publication projects waiting in the wings (Check-list of Illinois Birds and a new field card). We also have opportunities to start educational programs, something the Board strongly supports. To pursue these activities, we must have a sounder funding base.

One way to expand our financial health is to expand our membership. We now have about 512 members, and the Board has set a goal of 600 by December 31, 1998, and a long term goal of 1,000. We cannot achieve these goals without your help. Make a commitment to help promote our Society.

Your help is also needed on the conservation front. Each of you should have heard about the Teaming With Wildlife (TWW) funding initiative to fund conservation programs that will benefit birds and other non-game wildlife.

While this initiative targeted a user fee on selected outdoor equipment, a new initiative would use royalties from off-shore oil and gas leases to fund conservation and education programs.

Currently a discussion bill (The Conservation and Reinvestment Act of 1998 sponsored by Representatives Don Young, John Dingell, Billy Tauzin, and Richard Baker and Senator Mary Landrieu) has been developed and is circulating. The bill has three sections. Title 3 is the one section that is written to include the intent of TWW's proposal. Conservation groups still support the TWW method of funding but are not pushing it, and instead are waiting to see what happens to this new proposal. The National Teaming With Wildlife Coalition is encouraging supporters to study the new proposal and let their Senators and Representatives know their views.

From my perspective, this is one of the most important and beneficial conservation issues we are facing. I want to encourage each of you to study the proposal, and then let me and, most importantly, your Senators and Representatives hear your views. If you need information or would like to see a draft copy this proposal please contact me at PO Box 9, Dundee, IL 60118 or call me at 847-428-6331. Good birding and happy holidays.

Bob Montgomery

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Letter from the Editor

Take a first-timer on a CBC!

The first time I went on a CBC, many years ago (please don't ask how many), I was amazed to see robins in winter. It seemed anachronistic at first, puzzling, almost surreal. Now I knowingly nod when a new birder or first-time CBCer says to me, "We saw robins!"

I used to think the best time to get some new folks hooked on birding was in spring, when I'd take them to my favorite warbler spot and they could "ooh" and "ah" over the amazing array of colors. Unfortunately, while I'm "oohing" and "ahing," these beginners are struggling to get their binoculars focused on the bird, that, of course, is gone by the time they almost find it! They're frustrated, and I can hear them muttering, "This is too difficult."

But in winter, if you show a new birder a lovely colored avian creature against the backdrop of a dreary day, you've given them a glimmer of hope that maybe they can spot a bird, focus on it, and identify it. With that philosophy in mind, I encourage you to invite a new birder to join you during part of your Christmas Bird Count day. Point out the robins, the flocks of American Tree Sparrows with their cheery red caps, and yes, even the Black-capped Chickadees. Perhaps in the process you will remember what it was like when you saw your first American Tree Sparrow in the snow. The Christmas Bird Count season is a magical time for beginning and advanced birders.

Sheryl DeVore

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Yellow-breasted Chat drawing by Brian K. Willis.

Eastern Bluebird Productivity

Nest Site Selection, and Population Dispersal at Three DuPage County, Illinois Sites

By Victoria J. Byre and Mary Hennen

Abstract. - From 1989 - 1991, Eastern Bluebird (*Sialia sialis*) nest success, productivity, nest-site selection, and dispersal between sites were studied in three different habitats in DuPage County, Illinois (The Morton Arboretum, McKee Marsh, and Fermilab). One-hundred and thirty nest boxes were distributed over the three sites. Very little quantitative data exist on nest-site selection, nesting success, percent of a population returning to a site, or population dispersal between sites. Discriminant analysis significantly distinguished between the three sites. The Morton Arboretum site consistently had the highest percentage of box use by Eastern Bluebirds (56 %, 3 year average), and the highest productivity as measured by number of young fledged per successful nest (3.7/nest, 3 year average). Major causes of nest failure were House Wren (*Troglodytes aedon*) competition (6.7 % the first year) and raccoon (*Procyon lotor*) predation (10.7 % the second year). Strategic placement of nest boxes was the only successful method of reducing House Wren competition without hindering bluebird nesting. Use of a number of anti-predator devices greatly reduced raccoon predation. Data from the 624 adult and nestling bluebirds that were banded revealed a high annual turn-over rate at each study site, and a high number of nestlings that were absent during their first adult summer, but returned to their natal area to nest as second year adults. Over three years, nestlings from each of the three study sites were found at the other two sites. Availability of suitable nesting cavities is a major factor in the ultimate size and stability of local bluebird populations but habitat characteristics, food supply, predation, and nest box competition also are important variables.

A banded Eastern Bluebird. Photo by Victoria J. Byre.

Introduction

Although scientists have conducted a number of detailed studies of the Eastern Bluebird (*Sialia sialis*) (Thomas 1946, Hartshorne 1962, Krieg 1971, Pinkowski 1977a & 1979, Gowaty 1981, Eakin 1983), many aspects of the species' life history, habitat preference, productivity, and population dispersal are still poorly understood. In Illinois for example, no quantitative data exist on life expectancy, survival rate, or mortality factors other than "nest mortality" (Graber et al. 1971). Also, very little quantitative data exist on nesting success, percent of a population returning to a site, or population dispersal between nearby nesting sites.

In this paper we examine Eastern Bluebird populations in three separate and distinctly different habitats in DuPage County, Illinois. Data on nest success, productivity, nest site selection, and dispersal between sites are compared. Several management techniques are also suggested.

Description of Study Areas

DuPage County, Illinois, which lies approximately 43 km west of Chicago, is a heavily populated and rapidly developing section of northeastern Illinois. The three study areas, the Morton Arboretum in Lisle, IL (600 ha), McKee Marsh in Winfield, IL (240 ha), and Fermilab National Accelerator Laboratory in Batavia, IL (2800 ha), all lie along approximately the same latitudinal line and are separated from each other by 6 to 9 km of suburban development (Figure 1).

The Morton Arboretum bluebird trail, which consisted of 73 boxes by year three of the study, is located in open, savanna-type woodlands. Large oaks (*Quercus sp.*) are the dominant trees, and the groundcover is composed of Eurasian grasses that are mowed one to three times per year. At McKee Marsh, 9 km northwest of the Arboretum, the 41-box trail is in open grassland (*Bromus sp.* predominate) that borders a 32 ha man-made marsh. In contrast to the Arboretum site, none of the boxes at McKee Marsh are under a wooded canopy; most border floodplain woodlands or wooded fence rows and some are very much in the open (e.g. in meadows on exposed hilltops).

Fermilab, a high-energy physics research laboratory, the grounds of which are designated a National Environmental Research Park, is approximately 6 km southwest of McKee Marsh. Most of the 18 bluebird boxes on the site border a 10-year old reconstructed prairie. Indian grass (*Sorgastrum nutans*) and big bluestem (*Andropogon gerardi*) are the dominant grasses. Part of the prairie is usually burned each year in early spring or late fall. Scattered oak trees and an old apple (*Malus sp.*) orchard provide canopy cover for a few of the boxes. Five of the 18 boxes are located along the edge of an old pasture.

All three study sites had bluebird trails established four to eight years prior to the present study. The boxes at all sites were monitored only irregularly however, and only at the Arboretum site did a few pairs of bluebirds consistently fledge young.

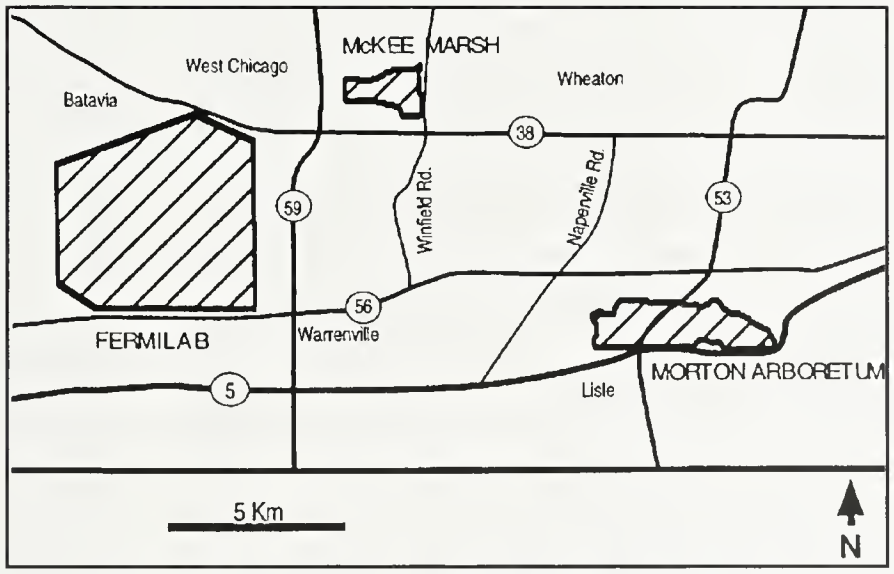


Figure 1. Location of three DuPage County, Illinois Eastern Bluebird study sites.

Mary Hennen, left, and volunteer Joan Harmet measuring bluebird nest box characteristics at Morton Arboretum. Photo by Victoria J. Byre.

Methods

Peterson-style (Henderson 1984) nest boxes, separated by a distance of at least 50 m and usually greater than 90 m (except for a few placed within 3–6 m of another box to reduce Tree Swallow [*Tachycineta bicolor*] competition), were used at all three study sites. Thirty-one boxes were added to the Arboretum site at the beginning of the second year of the study, and three more were added at the start of the third year. The number of boxes at the other two sites was kept virtually constant during all three years of the study. Most boxes were mounted on either smooth metal poles or steel fence posts (T-posts). A few boxes at the Fermi site were attached to trees. By the end of the second year of the study, approximately 90% of the 130 nest boxes were protected with at least one type of predator guard; usually either a heavy coating of grease on the pole or a wire "cat 'n coon guard" (Noel 1991) or both.

Throughout the nesting period (April to mid- August) from 1989 through 1991, all boxes were monitored a minimum of one to two times per week. During the 1988 nesting season, prior to the formal initiation of this study, 30 of the boxes at the Arboretum site were monitored at least weekly. Species use was determined by presence of adults or characteristics of nests or eggs. A nest was defined as a box containing at least

one egg and a successful nest fledged at least one young.

House Wrens (*Troglodytes aedon*) were discouraged from nesting in the bluebird boxes by placing the boxes away from shrubby, brushy areas and thickets. Tree Swallow competition was reduced by placing an additional nest box within 3 - 6 m of each of the nest boxes that was favored by the swallows. House Sparrows (*Passer domesticus*), a rare nest competitor at our sites, were discouraged by removing the nesting material immediately. Wasps (*Polisitis sp.*) and their nests were removed from in or under the nest boxes. Where wasps were a persistent problem, petroleum jelly applied to the inside roof of the box discouraged them from attaching their nests.

Bluebird nest and egg characteristics, including laying and hatching dates, clutch size and color, length and width of eggs (measured with dial calipers to nearest 0.1mm), number of nestlings and fledglings, and presence of ectoparasites such as blowfly larvae (*Protocalliphora sp.*) were all recorded.

Bluebird nestlings were banded when 8 - 12 days old with a standard aluminum U.S. Fish and Wildlife Service (USFWS) size 1B band and a unique combination of one to three plastic, butt-end type colored leg bands. Adult bluebirds, which were banded in a similar manner, were captured in mist nests or usually, in the nest box, either by placing a hand over the entrance hole or by using a cardboard "trap door" that had been taped to the inside top of the entrance hole and propped up with a stiff grass stem. The trap door, which was tripped when an adult bird entered the box, flapped down over the entrance hole trapping the bird inside. See Read (1990) for an illustration of this method.

To minimize possible desertion of the territory or nest, adults were not captured until the latter stages of the nesting cycle. Most captures took place near the end of incubation or when very young (1-5 day old) nestlings were present. Banding was not attempted in rainy weather or when the temperature was below normal, and nests were never disturbed for more than 10 minutes at any one time. Adults were banded whenever possible, especially at the Morton Arboretum site, but priority was placed on banding all nestlings at each study site. Individual bluebirds, identifiable by their color bands, were observed with binoculars and spotting scopes to document behavior and dispersal to new sites.

Nest box characteristics and the habitat surrounding each nest box were assessed to try to determine uniqueness of each study site, significant nest site selection factors, and relevance to nesting success. Fifteen variables were measured at each nest box (**Table 1**). Measurements were taken by a single observer within a five-day period during the nesting season. Entrance hole length and width and height from the ground to the bottom rim of the hole were measured with a tape measure. The direction each box faced was determined with a hand-held compass. Distance to nearest perch (> 1 m in height) and nearest closed canopy cover were measured with a surveyor's measuring wheel, as were distances to the nearest water, road, and building. Distances over 100 m were estimated by pacing. Height of the grass within a 3 m radius of each box was estimated by standing a tape measure parallel to three to five representative stems, measuring the heights in their "natural" positions, then averaging the results. The density of the grass within this same area was estimated as sparse (up to 50% bare ground), high (thick carpet with little or no bare ground visible) or medium (between the two extremes). Dominant grasses were estimated by

Table 1. Nest box characteristics and habitat variables evaluated at three DuPage County, Illinois study sites.

Variables	Units or Categories Recognized
Hole height from ground	Measured in centimeters
Hole length	Measured in centimeters
Hole width	Measured in centimeters
Direction entrance faces	N. NE, E, SE, S. SW, W. or NW
Box mount	Round metal pole, steel T post, wooden post, tree
Predator guard	Grease, wire hole guard, wren guard, or any combination
Distance to perch	Measured in meters
Distance to cover	< 30 m, 30-100 m, > 100 m
Distance to water	< 30 m, 30-100 m, > 100 m
Distance to roads	< 30 m, 30-100 m, > 100 m
Distance to buildings	< 30 m, 30-100 m, > 100 m
Height of surrounding grass	0-30 cm, 30.1-50 cm, 50.1-70 cm, >70 cm
Density of surrounding grass	Sparse, medium, high
Dominant grass	*Andropogon sp., Bromus sp., Dactylis sp., Festuca sp., Phleum sp., Poa sp., Sorghastrum sp.*
Habitat in which box was placed	Oak savanna; scattered deciduous trees or orchard; grassland bordering woodland; tree-lined fence-row along grassland or pasture; open grassland

visual inspection of grasses within the 3 m radius. A larger area (100 m radius) around each box was rated as to general habitat type according to the following guidelines: type 1 - savanna (> 50% canopy cover) consisting mostly of large trees such as oaks, type 2 - widely scattered deciduous trees or orchards (< 50% canopy cover), type 3 - tree lined fence row along grassland or pastureland, or grassland within 50 m of woodlands, and type 4 - open grassland (> 50 m away from any trees).

Stepwise discriminant analysis (McLachlan 1992) was used to analyze and compare the nest box characteristics and habitat variables at the three study sites. Calculations were carried out using the computer package SPSS/PC+ (Norusis 1988). Descriptive discriminant analysis imploring Wilks' Lambda was utilized with minimum F to enter and maximum F to remove set to 1.00 for stepwise variable selection. For canonical discriminant functions, maximum significance of Wilks' Lambda was set to 1.00.

Variables listed in Table 1 that were included in the analysis are hole height, hole length, hole width, distance to perch, distance to cover, distance to water, distance to road, distance to building, grass height, and grass density. The remaining variables were examined as indicators of habitat quality or successful use of the nesting box by bluebirds.

Results

Bluebirds nested at all three study sites during each year of the study. The Morton Arboretum site consistently had the highest percentage of box use by Eastern Bluebirds (**Table 2**), and the highest productivity as measured by number of young fledged per successful nest (**Table 3**). The Fermilab site was consistently the least productive.

Discriminant analysis significantly distinguished between the three sites, correctly classifying the Morton Arboretum 97% of the time, McKee Marsh 88% of the time, and Fermilab 74% of the time. Hole height and distance to water accounted for 97% of the variance between groups. The majority of misclassifications confused the McKee Marsh and Fermilab areas.

Initial examination of use of a box by bluebirds combined all three sites across years. Use was correctly classified only 74% of the time, and non-use was correctly classified only 57% of the time (barely above the per cent expected by prior probability (50%).

Comparison of use versus no-use of each nest box within a study area was done for the Morton Arboretum and McKee Marsh sites. Discriminant analysis could not significantly distinguish between the nest boxes used versus those not used at either site. The Fermilab site had too small a sample for this analysis.

Nesting Success - Of 208 bluebird nests attempted in the study area during 1989-1991, 149 (72%) were successful. Eighty-five percent of the successful boxes were mounted on round metal poles and were equipped with at least grease as a predator deterrent. Annual variation in suc-

Table 2. Number (and percent usage) of Eastern Bluebird nest boxes at three DuPage County, Illinois study sites.

1989:	**ARB**	**MCKEE**	**FERMI**	**TOTAL***
Boxes available	39	45	17	101
Use by bluebirds	21(53.8)	11(24.4)	1(5.9)	33(32.7)
Use by House Wrens	21(53.8)	16(35.6)	2(11.8)	39(38.6)
Use by Tree Swallows	3(7.7)	34(75.6)	9(52.9)	46(45.5)
Use by Black-capped Chickadees	6(15.4)	0	1(5.9)	7(6.9)
Use by House Sparrows	2(5.1)	2(4.4)	1(5.9)	5(4.95)
Use by European Starlings	0	0	0	0
Use by rodents	0	1(2.2)	O	1(0.9)
1990:	**ARB**	**MCKEE**	**FERMI**	**TOTAL**
Boxes available	70	42	18	130
Use by bluebirds	40(57.1)	13(30.9)	1(5.6)	54(41.5)
Use by House Wrens	45(64.3)	12(28.6)	4(22.2)	61(46.9)
Use by Tree Swallows	8(11.4)	29(69.0)	9(50.0)	46(35.4)
Use by Black-capped Chickadees	1(1.4)	5(11.9)	1(5.6)	7(5.4)
Use by House Sparrows	2(2.9)	1(2.4)	2(11.1)	5(3.8))
Use by European Starlings	0	0	0	0
Use by rodents	0	0	0	0
1991:	**ARB**	**MCKEE**	**FERMI**	**TOTAL**
Boxes available	73	41	18	132
Use by bluebirds	42(57.5)	7(17.1)	3(16.7)	52(39.4)
Use by House Wrens	40(54.8)	15(36.6)	7(38.9)	62(47.0)
Use by Tree Swallows	13(17.8)	28(68.3)	12(66.7)	53(40.2)
Use by Black-capped Chickadees	3(4.1)	4(9.8)	0	7(5.3)
Use by House Sparrows	0	0	0	0
Use by European Starlings	2(2.7)	0	0	2(1.5)
Use by rodents	0	0	0	0

**Totals may add up to more than 100% since some boxes were used by two or more different species at different times during the same season.*

cess ranged from 66.7% (1990) to 78.3% (1989) (**Table 3**). An average of 3.9 eggs was laid per nest and an average of 3.5 young was fledged per successful nest. For all seasons and study areas combined, approximately 65% of the eggs laid resulted in fledged young (0.72 successful nests x 3.5 average fledged per nest / 3.9 eggs laid per nest).

The three study areas differed in nest success and productivity. Over the three-year breeding period, bluebirds at the Morton Arboretum site had an average success rate of 76.6%, and an average of 68.2% of the eggs laid resulted in fledged young. The bluebird nests at the McKee Marsh site, on the other hand, had an average success rate of 63.5% and only 56.6 % of the eggs laid resulted in fledged young. The Fermilab site had too few bluebird nests to make valid comparisons.

Failures

During the first year of the study, House Wrens were the major known cause of bluebird nest failure, resulting in a 6.7% loss of bluebird eggs. This rate dropped to 3.0% during the second year and rose to 4.7% during the thirdyear (**Table 4**). House Wren competition was most prominent at the arboretum site which has a greater abundance of the brushy, shrubby habitat that the wrens prefer.

During the second year of the study, predation by raccoons (*Procyon lotor*), as evidenced by tracks and type of destruction, was the major known cause of nest failure. Raccoons caused no loss of eggs at any of the sites in 1989, but were responsible for a 10.7% loss of bluebird eggs during 1990. At McKee Marsh during that year, 25% of the bluebird eggs were lost to raccoons. With the installation or application of anti-predator devices, the overall failure due to raccoons dropped to 4% in 1991.

Tree Swallow competition was a cause of bluebird nest failure only at the McKee Marsh site (11.5% egg loss in 1990), where boxes were situated in much more open habitat than at the other two sites. The placement of a second nest box within three to six meters of a box at which bluebird and tree swallow competition was occurring almost always resulted in successful nesting by both species, one in the original box and one in the new one. In one instance however, Tree Swallows nested in both boxes, at a distance of only 2.5 m apart; a rare occurrence for such a territorial species.

Human interference with nests or young was not a major factor until the third year of the study, but did cause 7.4% of the eggs to fail that year, mainly from vandalism (destruction of nest boxes, removal of hardware etc.) to occupied nest boxes.

Unknown causes of failure include such factors as infertile or ab-

Table 3. Eastern Bluebird nesting data for three DuPage County, Illinois study sites.

	1989A*	1989M	1989F	1989T	1990A	1990M	1990F	1990T	1991A	1991M	1991F	1991T
Number of nests	33	12	1	46	64	22	1	87	62	8	5	75
Number of eggs laid	144	45	5	194	277	61	0	338	251	31	15	297
Eggs/nest (clutch)	4.4	3.8	5.0	4.2	4.3	2.8	0	3.9	4.1	3.9	3.0	3.6
Eggs hatched	109	36	4	149	208	40	0	248	195	21	5	221
(percentage)	(75.7)	(80)	(80)	(76.8)	(75.1)	(65.6)		(73.4)	(77.7)	(67.7)	(66.7)	(74.4))
Eggs hatched/nest	3.3	3.0	4.0	3.2	3.3	1.8	0	2.9	3.2	2.6	1.0	2.9
Nestlings lost	12	2	0	14	17	12	0	29	24	6	0	30
(percentage)	(11.0)	(5.6)		(9.4)	(8.2)	(30)		(11.7)	(12.3)	(28.6)		(13.6)
Young fledged of eggs laid	97	34	4	135	191	28	0	219	171	15	5	191
(percentage)	(67.4)	(75.6)	(80)	(69.6)	(68.9)	(45.9)		(64.8)	(68.1)	(48.4)	(33.3)	(64.3)
Young fledged of eggs hatched	97	34	4	135	191	28	0	219	171	15	5	191
(percentage)	(88.9)	(94.4)	(80)	(90.6)	(91.8)	(70)		(88.3)	(87.7)	(71.4)	(100)	(86.4)
Young fledged/nest	2.9	2.8	4.0	2.9	2.9	1.3	0	2.4	2.8	1.9	1.0	1.9
Successful nests-at least one fledged	24	11	1	36	50	8	0	58	49	5	1	55
(percentage)	(72.7)	(91.7)	(100)	(78.3)	(78.1)	(36.4)		(66.7)	(79)	(62.5)	(20)	(73.3)
Productivity-young fledged/successful nest	4.0	3.1	4.0	3.8** 3.6	3.6	3.5	0	3.6	3.5	3.0	5.0	3.8** 3.3

*A=Morton Arboretum, M=McKee Marsh, F=Fermilab, T=total

**Productivity calculated with (top number) and without (bottom number) Fermilab data, which skews results.

Table 4. Causes of Eastern Bluebird nest failure at three DuPage County, Illinois study sites. Number and percentage of eggs or nestlings lost.

CAUSE OF FAILURE	1989A	1989M	1989F	1989T	1990A	1990M	1990F	1990T	1991A	1991M	1991F	1991T
House Sparrow	0	0	0	0	0	0	0	0	0	0	0	0
House Wren (percentage)	11 (7.6)	2 (4.4)	0	13 (6.7)	10 (3.6)	0	0	10 (3)	9 (3.6)	0	5 (33.3)	14 (4.7)
Tree Swallow (percentage)	0	0	0	0	0	7 (11.5)	0	7 (2.1)	0	0	0	0
Other Eastern Bluebird (percentage)	0	0	0	0	5 (1.8)	0	0	5 (1.5)	4 (1.6)	0	0	4 (1.3)
Raccoon (percentage)	0	0	0	0	21 (7.6)	15 (25)	0	36 (10.7)	4 (1.6)	4 (12.9)	4 (26.7)	12 (4)
Human (percentage)	6 (4.2)	0	0	6 (3.1)	5 (1.8)	0	0	5 (1.5)	13 (5.2)	9 (29)	0	22 (7.4)
Weather (percentage)	5 (3.5)	0	0	5 (2.6)	0	0	0	0	0	0	0	0
Unknown (percentage)	24 (16.7)	9 (20)	1 (20)	34 (17.5)	45 (16.2)	11 (18)	0	56 (16.6)	50 (19.9)	3 (9.7)	1 (6.7)	54 (18.2)
Outcome unknown	1	0	0	1	1	0	0	1	0	0	0	0

*A = Morton Arboretum, M = McKee Marsh, F = Fermilab, T = Total

normal eggs, faulty incubation, unexplained abandonment of eggs or young, unexplained disappearance of one or both adults, and fluctuations in food supplies and weather conditions. Most of these factors are extremely difficult to verify, hence the large percentage of unknown causes of failure each year.

Banding

Forty-five adult Eastern Bluebirds (36 females and 9 males) and 579 nestlings were banded during the course of the study (**Table 5**). Forty-seven of these (3 adult females and 44 nestlings) were banded at the Morton Arboretum site in 1988, before the formal initiation of this study (with USFWS bands only).

Thirty-eight individuals or 8.6% of the 444 bluebirds banded from 1988 - 1990 returned to the study sites for one or more years. Thirty (19.4%) of the bluebirds (23 nestlings and 7 adults) banded in 1989, returned in 1990 and/or 1991 (**Table 6**). Seven of the nestlings that returned as adults to nest on the study sites in 1991, had been banded in 1989 and were not in evidence at any of the sites during 1990.

The overall number of breeding adults increased quite dramatically from the first to the second year of the study (64 adults in 1989, 98 adults in 1990). This increase in breeding adults did not come solely from the previous year's fledglings at each site however. At the Morton Arboretum site, for example, even though all nestlings and nearly 70% (15 of 22) of the

Table 5. Number of Eastern Bluebirds banded at three DuPage County, Illinois study sites.

	MORTON ARBORETUM				MCKEE MARSH	FERMILAB	YEARLY TOTALS			TOTAL BANDED
Year	Males	Females	Nestlings	Total	Nestlings	Nestlings	Males	Females	Nestlings	
1988	0	3	44	47	0	0	0	3	44	47
1989	5	15	97	117	34	4	5	15	135	155
1990	4	17	193	214	28	0	4	17	221	242
1991	0	1	163	164	11	5	0	1	179	180
Totals	9	36	497	542	73	9	9	36	579	624

Note: Banding was not initiated at McKee Marsh or Fermilab until 1989, and no serious attempt was made to band adults at those sites.

adult females were banded in 1989, 26 unbanded adult females were present at the site in 1990. All 7 of the year-old, banded male nestlings that returned to nest at the Morton Arboretum in 1990 were paired with unbanded females. And, although all but 7 (17 out of 24) of the adult females and all nestlings (193) at the Morton Arboretum were banded in 1990, 18 of the 29 females nesting there in 1991 were unbanded.

Five bluebirds had a consecutive three-year history, and 5 bluebirds had a three-year history but with the middle year missing. Seventeen bluebirds returned for two consecutive years during the study. A few individuals returned to the same box from which they had fledged or in which they had raised young the previous year, but most birds moved to other boxes within the same study area from one year (or even from one brood) to the next.

While most of the returns were seen at the same site at which they had been banded, there was evidence of interaction between the three study areas. A female bluebird banded as a nestling at Fermilab in 1989, nested at the Arboretum in 1990; and, a male banded as a nestling at the Arboretum in 1989, nested at McKee Marsh in 1990. Also, two males banded as nestlings from the same nest at McKee Marsh in 1989, returned in 1991, after a year spent elsewhere, one to Fermilab and one to the arboretum. Therefore, Eastern Bluebird nestlings from each of the three study sites have appeared at the other sites.

Discussion and Management Recommendations

During our study, the number of Eastern Bluebird nesting pairs increased from 11 in 1988, before regular monitoring began, to a peak of 49 in 1990. The number dropped to 42 in 1991, despite a slight increase in the number of boxes available. Also, despite a relatively constant number of boxes available from 1989 - 1991, the number of nests peaked at 87 in 1990, up from 46 the year before, but dropped slightly to 75 in 1991. These results are consistent with the assumption that availability of suitable nesting cavities is but one of the many interdependent and complex factors involved in Eastern Bluebird population dynamics (Parren 1991).

Seventy-nine per cent of the bluebird nesting activity took place at the Morton Arboretum where the habitat consists of open grassy areas with scattered trees and shrubs. Discriminant analysis well distinguished the three sites. The two sites that had the least bluebird use (Fermilab and McKee Marsh) had the most between-group confusion, which supports the hypothesis that sites with suboptimal habitat would have the most misclassification with each other.

With the variables used in this study, discriminant analysis could not distinguish between boxes used versus those not used. The results were examined for indications of bluebird preference. Further studies may analyze a wider range of variables in greater detail as the interpretation of the data warrants. Overall, shorter grass height was found at the Arboretum (an average height of 62 cm as opposed to 70 cm at McKee Marsh and Fermilab). The preference for shorter grass was strengthened when hole height was also considered. The mean hole height for the arboretum, 171 cm, was higher than that found at the other two sites (124 cm for McKee Marsh, 152 cm for Fermilab).

Our discriminant analysis results concur with past studies of bluebird habitat, confirming the Eastern Bluebird's preference for open areas with scattered trees and sparse or relatively short herbaceous vegetation (Willner et al. 1983, Munro and Rounds 1985, Parren 1991, Pogue and Schnell 1994). The importance of short grass or sparse vegetation as foraging area for bluebirds may be a key factor in this habitat preference, more important than entrance hole height or the grass height to entrance hole height ratio (Pinkowski 1977b, Power 1980).

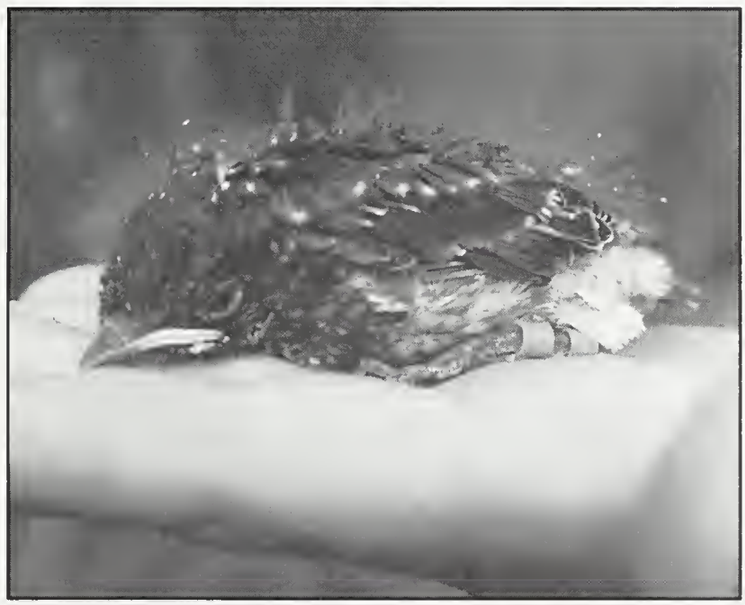
Competition from other cavity-nesting species is a factor that can greatly influence bluebird nesting success, and one that can never be completely eliminated (Munro and Rounds 1985). Although House Wren

Table 6. Return of banded Eastern Bluebirds at three DuPage County, Illinois study sites.

BANDED IN:	RETURNED IN:		
1988	**1989**	**1990**	**1991**
3 adults	2 adults (66.6%)	1 adult (33.3%	1 adult (33.3%)
44 nestlings	0 nestlings	0 nestlings	0 nestlings
47 total	2 (4.3%) total	1 (2.1%) total	1(2.1%) total
1989			
20 adults	—	7 adults (35%)	2 adults (10%)
135 nestlings	—	16 nestlings (11.9%)	12 nestlings (8.9%)*
155 total	—	23 (14.8%) total	14 total (9.0%)
1990	--	—	2 adults (9.5%)
21 adults	—	—	3 nestlings (1.4%)
221 nestlings	—	—	5 total (2.1%)
242 total	—		

* Seven of these nestlings were not seen in 1990 but returned to breed in 1991.

competition for nest boxes was reduced by placing the boxes away from the shrubby areas wrens prefer, wrens were still a major cause of bluebird nest failure during all three years of the study. Because House Wrens are smaller than bluebirds, there is little that can be done to make a bluebird nest box "wren-proof" and still acceptable to bluebirds. Several hole designs and "wren guards" have been tried on bluebird boxes (Berner 1990, Berner 1991, Berner and Pleines 1993), and a wren guard designed by Pollock (1989) was tried on several of our boxes. Results of our tests and those of the others show that wrens were still able to gain access to nest boxes to build nests or destroy bluebird eggs. The only effective way to reduce competition from House Wrens is by trial and error; e.g., relocating nest boxes used by wrens (usually to more open areas) until they find them unacceptable (Parren 1991).



Eastern Bluebird fledgling. Photo by Victoria J. Byre.

Boxes placed in open areas should be monitored closely for Tree Swallow competition. If a second box is placed within 3 - 6 m of the contested box, the chances of having both species nest successfully will be increased.

The fact that raccoon-caused nest failures rose from 0% in 1989 to 10.7% in 1990 may represent learned behavior by the raccoons. By using several anti-predator management techniques (mounting houses on smooth metal poles, greasing the poles with white lithium grease, and attaching wire guards to the fronts of the boxes) overall egg loss due to raccoons was reduced to 4% the following year. It is safe to assume that eventually a raccoon will find and try to investigate any nest boxes in its territory. Precautions taken to prevent them from successfully gaining access initially will save much time and effort later, as raccoons are very persistent once they have found a food source. Nest boxes should always be mounted at least 1.3 m above the ground on smooth round poles that have at least a 0.5 m wide, liberal coating of grease (carnuba car wax may be a less messy alternative (Davis 1993). In high risk areas, an anti-predator device should also be attached below or onto the front of the nest box. The Noel "cat 'n coon" guard (Noel 1991) appeared to work well in our application. The "bird guardian," a tube-like commercially available predator guard that fits over the entrance hole has not proved effective (Berner 1991, Berner and Pleines 1993).

Human-caused nest failures can best be prevented by strategic placement of the nest boxes (especially away from frequently used paths or roads) and informative signage and public education.

While a number of Eastern Bluebirds returned to their previous year's nesting areas the following year, a surprisingly large number of unbanded adult birds appeared each spring, despite the fact that all nestlings and most adult females (the majority of which nested successfully) were banded at each study site during the previous years. This finding is somewhat contrary to a study done by Pinkowski (1979) in which the number of Eastern Bluebirds nesting in an area gradually increased after the initial provision of nest boxes, because young birds that were reared in the area were returning there to breed, and adults that were successful in the area were returning there for subsequent nestings. While our bluebird population also increased quite dramatically, many of the birds were "new" to each site each year, and took advantage of the abundance of nest boxes provided. This high turnover rate was surprising and certainly would not have been suspected had the banding study not been done.

Preliminary banding returns also indicate that a large number of nestlings from our study areas spent their first adult summer somewhere other than their hatching site, then returned to their hatching site during their second adult year to nest. Whether these two-year-olds nested somewhere else during their first summer is unknown.

Our banding returns also show that local bluebird populations do intermix. Areas of higher productivity, such as the Morton Arboretum site may provide a source of birds for areas of lower productivity such as the McKee Marsh and Fermilab sites. Likewise, areas of higher quality habitat may draw birds to them from less suitable areas.

Many factors are involved in the ultimate size and stability of a local Eastern Bluebird population. The availability of suitable nesting cavities is certainly a major factor, but food supply, predators and competitors, habitat characteristics, and local and regional weather conditions

are also important factors that influence size and success of local populations. It seems likely that if good quality habitat within the Eastern Bluebird's nesting range contains properly monitored nest boxes, bluebirds will eventually colonize the area provided the regional population base is sufficiently high. These local areas, especially those that provide predator proof nesting boxes, can aid in increasing the Eastern Bluebird's nesting success.

Acknowledgments

We wish to thank the respective administrations and staffs of the three study areas for allowing us to conduct bluebird studies on their sites and for aiding us at times with equipment and labor. Thanks especially to Dick Wason (deceased) and Chris Whelan of the Morton Arboretum, Dan Ludwig of the DuPage County Forest Preserve, Rudy Dorner of Fermilab and Ed Miller of Governor's State University. Jeff Hardt put in uncountable hours monitoring bluebird boxes especially at the Morton Arboretum and McKee Marsh sites, and Joan Harmet put in many hours of data entry. Ron Olsen and his Boy Scout Troop constructed a large number of nest boxes for us. This study was funded in part by the Chicago Academy of Sciences and by a grant from the North American Bluebird Society.

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The 1997 Illinois Christmas Bird Count

By David B. Johnson and Alan F. Stokie

Nearly every birder claimed the discovery of good birds and high numbers during the 1997 Illinois Christmas Bird Count. This phenomenon was probably due, in part, to the El Niño winds. Predominately southerly warm air flowed through Illinois during the later part of the count period, 19 Dec. 1997-4 Jan. 1998, giving observers spring-like weather in early winter. Despite a 5-inch snowfall in northern Illinois on Christmas Eve, birds that were supposed to depart lingered and many count circles recorded all-time high species counts. The expected winter finch invasion did happen, but for some counts, finches mainly trickled in and waterbirds remained in one place. Passerines stayed long enough for some counts to bolster landbird tallies .This mix of good water and land bird numbers along with some winter finches gave Illinois compilers the right stuff!

Yellow-breasted Chat. Little Red Schoolhouse, Cook Co. 31 Dec. 1997. This chat wintered here (see seasonal highlights for details) and was observed at the Lisle Arboretum Christmas Bird Count. Photo by Joe B. Milosevich.

Results from 61 counts included 169 species, including one exotic Monk Parakeet, a Baltimore Oriole (actually in Iowa), and the unbanded Trumpeter Swans at Crane Lake/Sangamon. The result was 20 species higher than the 1996 Illinois CBC.

Rend Lake led the way with 104 species — a remarkable total. Nine other counts recorded 90 or more species, four of which were reported as all-time record species counts: Cypress Creek (96); Carlyle Lake (95); Clinton Lake (93), a record count; Union County (92); Horseshoe Lake (92); Chautauqua, a record count (90); Crane Lake/Sangamon (90); Springfield, another record count (90); and Evanston (90), a record count (in 36 years) and surprising for northern Illinois. Collinsville had the highest number of individuals: 1,206,189. Fermilab/Batavia fielded the highest number of observers in the state, 95. In second place was Lisle, with 63 observes. Evanston came in third with 57 observers.

We welcome a new count and all their Greater Prairie-Chickens, all 103 of them to be exact, from Newton in the southeast central portion of our state. Jeff Walk compiled this count. We also welcome Mermet Lake in the south, compiled by Frank Bennett. Also, thanks to Larry Hood for resurrecting the Bushnell Count (see the count circle map; blank circles indicate counts not reported to us this year or bordering circles that do not report their counts).

CBC Firsts and Rarities

The top rarity prize goes to Lisle Aboretum's **Yellow-breasted Chat** (see photograph) at the Little Red Schoolhouse Forest Preserve in Cook County. The bird feasted on bees that emerged from their hive during the winter warm-ups! A state and CBC first were two **Eurasian Collared-Doves** at Carlyle Lake. These two birds attempted to breed in winter and were well-documented by photographs. This rapidly colonizing species was also recorded at Champaign. This is the second record for Illinois of this invading species.

The well-documented **Prairie Falcon** at Clinton Lake was the most outstanding raptor find. Lingering shorebirds included five Pectoral Sandpipers at Meredosia Island, a count week Greater Yellowlegs, three Least Sandpipers and two Dunlins at Mermet Lake and another at Pere Marquette. Clinton Lake's **Sedge Wren** was a well-documented find. A count week **Varied Thrush** was at a feeding station at Joliet.

Some insectivores like warblers were noted more than usual in the state; four Orange-crowned Warblers were detected on four counts: Morris/Wilmington (see photograph), Kishwaukee, Springfield, and Rend Lake. Springfield had a well-

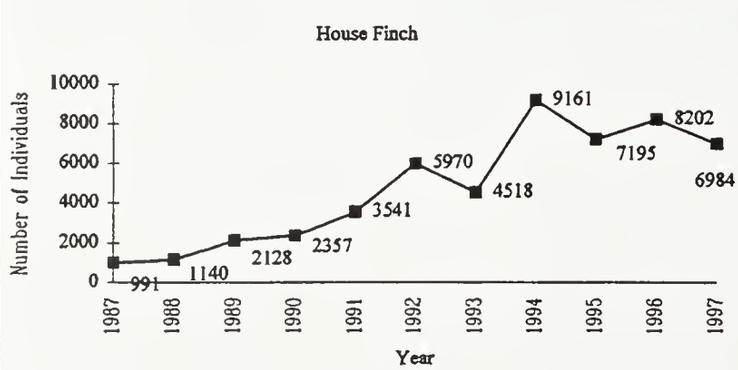
described **Nashville Warbler.** An excellent tally of 1,062 Yellow-rumped Warblers was noted on 35 counts. Rend Lake had the only other Pine Warbler besides Crab Orchard's five. Evanston recorded its first ever Palm Warbler as did Middlefork River Valley and Baldwin Lake/ Kaskaskia River Valley. Rockford and Decatur recorded their first ever Common Yellowthroats and other singles were at Calumet/Sand Ridge, Crane Lake/Sangamon and Baldwin Lake. A count-week **Wilson's Warbler** was at Springfield.

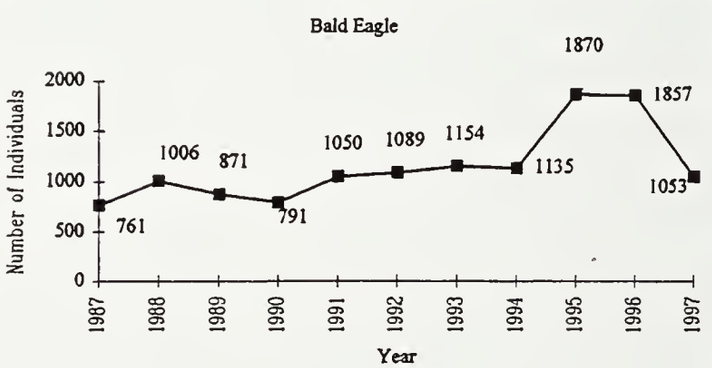
Other unusual birds included 21 American White Pelicans on five counts along the Mississippi River with Pere Marquette recording the highest number, 16. An **American Bittern** was recorded at Carlyle Lake, and a Great Egret was recorded at Jackson. Four and six Ross's Geese appeared at Rend Lake and Union County, respectively. Also, most unusual was the apparent Ross's X Snow Goose hybrid at Rockford. Twenty Blue-winged Teal (on six counts), a bird normally in Central America by this time, put in a good showing. The only scoters were a count-week Black Scoter at Waukegan, two White-wingeds at Evanston, and a count-first Surf for Decatur. A female **Harlequin Duck** was at a jetty intake, feeding on zebra mussels in Lake Michigan at Waukegan. Solitary Merlins were noted at Thorn Creek/Park Forest, Kishwaukee, Clinton/Iowa, Meredosia Island, and Cypress Creek.

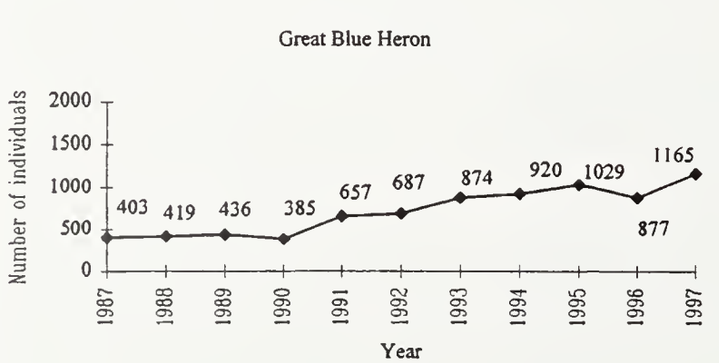
Four Northern Goshawks were reported on four counts. This species has long been absent from Illinois in winter. Two Sandhill Cranes at Chillicothe were noteworthy, and count-week birds were detected at Waukegan and Lisle Arboretum. Middle Fork River Valley had the only **Sora**. The only uncommon gulls were Lesser Black-backed Gulls at Chicago Lakefront and Calumet/ Sand Ridge plus a count week bird at Springfield. Only four Glaucous Gulls were recorded on four counts with the southernmost at Elsah. A noteworthy **jaeger** species was recorded at Rend Lake. The state's only Barn Owls were three at Cypress Creek. Waukegan and Illini reported the only two Snowy Owls (Chicago Lakefront also had a count-week bird). An apparent **Barn Swallow** was at Carlyle, but no details were reported.

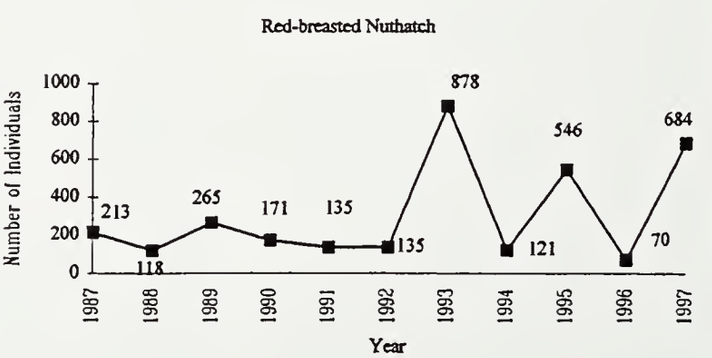
The lone northern Illinois **American Pipit** was Evanston's first and perhaps a first wintering record for northern Illinois. Well-documented Spotted Towhees were tallied at Barrington and Chautauqua. Four immature female Indigo Buntings were at Rend/Carlyle (2) and Horseshoe Lake. The only Le Conte's Sparrows were two each at Cypress Creek and Carlyle Lake. The only Vesper Sparrow was at Crane Lake/Sangamon plus a count-week bird was at Champaign. Solitary Harris's Sparrows were at Van Patten, Davenport, and Cypress Creek. A remarkable 11 Harris's Sparrows were reported at Elsah and 25 at Humiston Woods, but no details accompanied the reports, so the data were deemed inaccurate. Well-described solitary Chipping Sparrows were at Horseshoe

Histograms





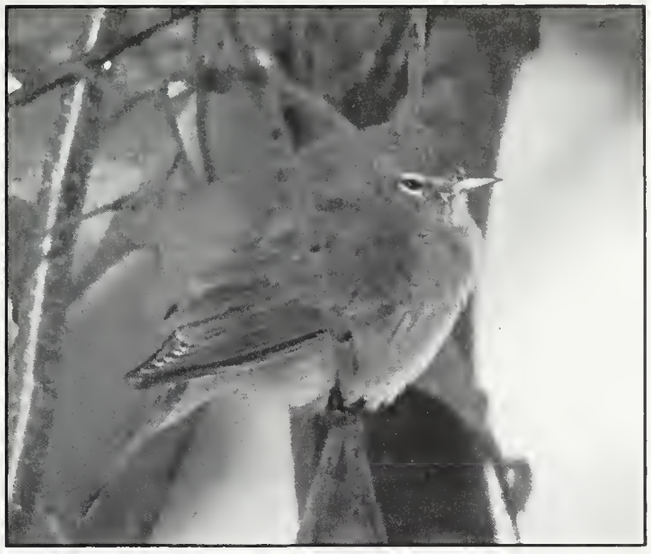




Lake and Pere Marquette. A Brewer's Blackbird was at Mermet Lake.

One of the most interesting lingerers was a **Baltimore Oriole** (in IA) at Davenport.

Finally, the agony of **the bird that did NOT count** on this year's CBC was the bird two miles outside of Leon Hendrickson's Collinsville circle, a male **Rufous Hummingbird** that wintered in Illinois.



Orange-crowned Warbler. Des Plaines Conservation Area, Will Co.30 Dec. 1997. This bird was seen on the Morris-Wilmington Christmas Bird Count. Photo by Joe B. Milosevich.

Regularly Occurring Species

Great Blue Herons were recorded in unusually high numbers. Observers reported 1,165 individuals in 52 count circles, perhaps reflecting on the expanding breeding colonies in both Illinois and to the north (see histogram). Burgeoning Canada Geese defy imagination and are becoming a nuisance in suburbia. Observers counted record numbers of 22,517 and 12,451 individuals at Barrington and Rockford respectively, mirroring an increasing population statewide. Fifty-seven Oldsquaws (in five circles with Carlyle Lake being the southernmost) seems troublesome as this species used to winter in greater numbers on Lake Michigan. Evanston was the only count with 44 individuals at the lakefront.

No Gray Partridge records were noted this year.

Starved Rock had a record 24 Bald Eagles in northern Illinois. Birders recorded 1,053 Bald Eagles in Illinois and the Iowa counts included here. These numbers are lower than last year's (see histogram) perhaps indicating the species was wintering farther north due to the warmer weather.

Several compilers commented that some owls were sparse while others like Great Horned, Eastern Screech, Barred, and Short-eared Owls were relatively common. In the sparse department were 21 Long-eared Owls recorded in 12 count circles and only four Northern Sawwhet Owls statewide, two at Middle Fork River Valley and one each at Thorn Creek/Park Forest and Clinton Lake. Birders counted 1,141 Red-headed Woodpeckers (a bird of special concern) in 50 count circles. This number is higher than the 640 counted in 48 circles last year. The 684 Red-breasted Nuthatches in 57 count circles represents the second highest state total in at least 10 years (see histogram). How, if at all, does this correlate to this year's winter finch invasion? Was it due to a cone crop failure farther north?

Only 9 Northern Shrikes were recorded this year (in seven circles). Fifty-one Loggerhead Shrikes were counted in 15 circles, two in central and the rest in southern Illinois.

Irruptive Species

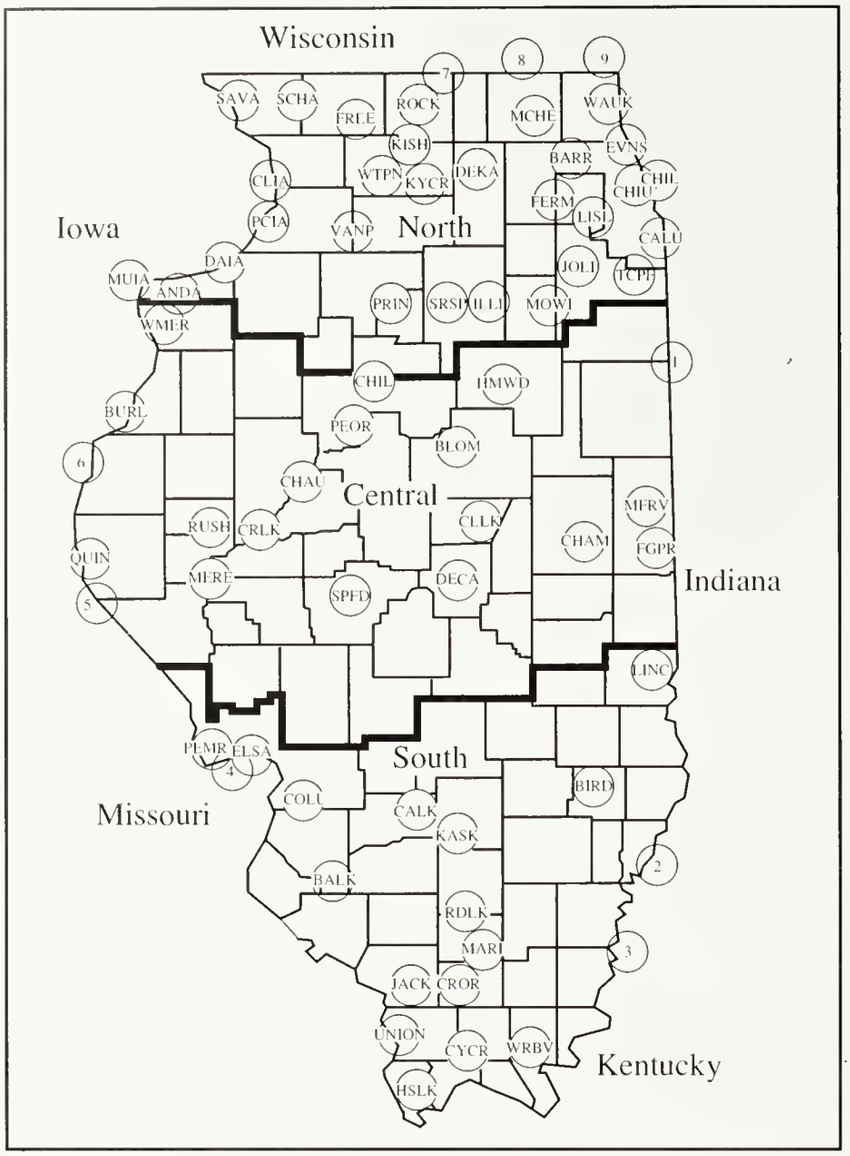
The winter finches! They were best represented by 1,810 Pine Siskins (in 40 count circles); 118 Common Redpolls (in 9 count circles, none in southern Illinois); 97 White-winged Crossbills (in 5 count circles) with Springfield having 13 birds, the farthest south in the state; and only 11 Red Crossbills statewide including 4 at Kishwaukee, 1 at Chautauqua, 5 at Mustcatine, and 1 at Princeton/Cordova. The *creme de la creme* winter finch find goes to the well-described pair of **Pine Grosbeaks** at McHenry. Evening Grosbeaks, however, were conspicuously absent.

High Counts

Twelve new all-time state high counts were set and one was tied for an individual species total recorded within a count circle. Observers recorded **78 Pied-billed Grebes** at Rend Lake, **181 Great Blue Herons** at Carlyle Lake, **7 Trumpeter Swans** at Crane Lake/Sangamon (some of which were unbanded or uncollared), **3,852 Ring-necked Ducks** and **93 Hermit Thrushes** at Cypress Creek, and **5 Pectoral Sandpipers** at Meredosia Island. An amazing tally of **38 Short-eared Owls** was recorded at Newton (a new count circle). Horseshoe Lake, however, captured four all-time high counts of: **10 House Wrens, 4,500 American Robins, 62 American Pipits** and **1,500 White-throated Sparrows**. Union County had a record **203 Eastern Bluebirds** and **83 Hermit Thrushes**. Crab Orchard NWR, once again, recorded **5 Pine Warblers**. The **998 Lapland Longspurs** at Middle Fork River Valley was a significant high count for central Illinois.

Documentation of Rarities

No reliable evidence exists for wintering Ospreys in Illinois. Two reports on this year's CBC were unconvincing to the Illinois Ornithological Records Committee. Birders must be aware that "white-bellied" Bald Eagles can often be confusing at a distance, especially those individual eagles that have dark in the nearly all-white head, appearing as if there's a dark eye-stripe. Hard



Key to Tables

Code	Description
cw	count week only (3 days before or after)
dd	details desired
ed	excellent details
gd	good details
hc	high count for that circle
HC	All-time High Count for the state
imm	immature
nc	new species to that circle's count
NC	New to the state's Count species list
nd	no details
ps	Present for sometime
ph	Photographed
qd	questionable details
rn	remarkable number
rr	remarkable record
ud	unconvincing details
y,nn-c	young, no neck collars
*	Documented species
boldface	Species/number/itemof note

evidence such as a photograph or video may be necessary to properly document a wintering Osprey in Illinois.

Careful scrutiny and descriptions must also accompany Brewer's Blackbird reports for winter in Illinois. Descriptions in the field are required for this species' acceptance and other notable extreme departures and rarities on all Illinois CBCs.

Acknowledgments and Comments on Documentation

Thanks to all compilers and observers who noted highlights this year for their respective counts. You made our job a lot easier! Any errors of omission or any inaccuracies of the data herein are the authors. As a general note to compilers the "sp." or species data of CBCs is sometimes excessive on some counts often to the point where too many birds are being unidentified. This information is discouraged from submission. We recommend the use of these sp. references only: duck, scaup, merganser, accipiter, buteo, falcon, hawk, gull, owl, sparrow, meadowlark, and blackbird sp. All other sp. that are not identified in the future count reports will be dropped from publication, unless the compiler states a good argument to include the data.

The 99th Christmas Bird Count will be held Friday, 18 December 1998 through Sunday, 3 January 1999. Until then, good birding!

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Editor's Note: *With this issue of* Meadowlark *we adopt the sequence of birds as published in the seventh edition of the American Ornithologists' Union Check-list of North American Birds, issued July of 1998. A complete listing of Illinois birds following the updated taxonomy is being prepared by the Illinois Ornithological Records Committee.*

Illinois '97 Christmas Bird Count • Table 1

Count Name	Map I.D.	Date	Time		Temp		Sky	Snow	Water	Wind	Wind	Velec.	Field	Feeder	Feeder	Parties	Party	Hours	Hours	Party	Miles	Miles	Owling	Owling	Compiler	Area
			Begin	*End*	*Low*	*High*				Direction	*Low*	*High*	Obsrv	Obsrv	Hours	Parties	Hours	on foot	by car	Miles	on foot	by car	Hours	Miles	Hours	
Andalusia-Buffalo	ANDA	29-Dec	0445	1715	20	30	Cloudy; light snow	5.00	Prtly Froz	NW	10	15	6	0	0.00	3	28.50	4.50	24.00	296.50	5.50	291.00	4.50	45.00	Kelly J. McKay	
Barrington	BARR	22-Dec	0715	1645	30	34	Cloudy; rain	1.00	Prtly Froz	E-NE	2	8	30	7	14.00	14	92.50	55.00	37.50	344.00	45.00	299.00	2.00	4.00	Duane Heaton	
Calumet City-Sand Ridge	CALU	27-Dec	0700	1600	21	31	Cloudy; clear	0.00	Open	NW	11	11	34	8	14.00	19	93.50	71.00	22.50	331.00	64.00	267.00	0.50	0.50	Carolyn Marsh	
Chicago Lakefront	CHI L	25-Dec	0700	1500	20	28	Clear	2-3.00	Prtly Froz	W-NW	3	10	8	0	0.00	2-3	16.00	12.00	4.00	65.50	11.50	54.00	0.00	0.00	Joel Greenberg	
Chicago Urban	CHI U	21-Dec	0400	1600	29	36	Partly Clear	0.00	Open	E	5	10	9	10	10.00	7	57.00	45.00	12.00	349.00	49.00	300.00	3.00	12.00	Jeffrey Sanders	
Clinton IA-Savanna Fulton	CL IA	23-Dec	0530	1730	32	37	Cloudy, light rain	0.00	Prtly Froz	E, NW	6	15	6	0	0.00	4	36.00	6.00	30.00	424.00	6.00	7.00	3.00	29.00	Kelly J. McKay	
De Kalb	DE KA	27-Dec	0645	1630	18	28	Partly Cloudy	4.00	Prtly Froz	Calm	0	0	9	0	0.00	5	30.00	13.50	16.50	231.50	20.50	211.00	0.00	0.00	Kevin M. Jury	
Evanston North Shore	EVNS	27-Dec	0430	1700	20	29	Clear	2.00	Prtly Froz	NW	10	15	57	21	25.00	21-24	133.00	109.00	24.00	391.00	97.00	294.00	7.00	26.00	J. Greenberg, A. Stokie	
Fermi Lab-Batavia	FERM	20-Dec	0630	1645	27	38	Cloudy	0.00	Prtly Froz	W-NW	8	15	95	2	6.00	9-28	172.00	127.50	44.50	529.00	114.50	414.50	5.00	15.00	Denis Kania	
Freeport	FREE	3-Jan	0715	1600	34	52	Cloudy; Light rain	0.00	Prtly Froz	SW	5	5	4	18	10.00	4	30.75	5.00	25.75	396.00	4.50	391.50	2.00	50.00	Keith Blackmore	
Illini State Park	ILLI	21-Dec	0515	1645	34	40	Cloudy	1.00	Prtly Froz	SE	9	20	11	3	4.00	5	41.75	11.50	30.25	477.00	10.00	467.00	3.50	23.00	Jim Hampson	N
Joliet	JOLI	20-Dec	0700	1630	32	37	Cloudy	0.00	Prtly Froz	W	5	10	11	2	2.00	7	55.00	25.00	30.00	320.00	20.00	300.00	1.00	8.00	Jerry Olson	
Kishwaukee	KISH	3-Jan	?	?	55	45	Cloudy; Light rain	0.00	Prtly Froz	S	15	15	35	7	14.00	15	98.00	62.75	35.25	645.00	63.00	582.00	3.00	6.00	Brad Grover	
Lisle Arboretum	LISL	21-Dec	0500	1700	26	37	Partly Cloudy	0.00	Prtly Froz	NNE	7	7	63	1	5.00	20-27	149.00	107.00	42.00	541.00	129.00	412.00	17.00	36.00	Ralph Hopper	
McHenry County	MCHE	20-Dec	0730	1700	28	37	Cloudy	0-1.00	Prtly Froz	N	5	5	35	3	6.00	13	67.25	30.50	36.75	476.75	31.25	445.50	2.75	25.00	David A. Frey	
Morris-Wilmington	MOWI	27-Dec	0715	1630	21	29	Clear	0.00	Prtly Froz	WNW	2	5	9	0	0.00	8	66.00	22.50	43.50	479.25	28.25	451.00	0.00	0.00	John Stofan	
Muscatine IA-IL City	MU IA	28-Dec	0500	1700	32	38	Foggy	0.00	Prtly Froz	S	5	10	9	6	12.00	4	36.00	8.00	28.00	413.00	8.00	385.00	6.50	42.00	Kelly J. McKay	
Princeton-Bureau	PRIN	3-Jan	0530	1645	52	60	Cloudy; light rain	0.00	Prtly Froz	calm	0	0	6	0	0.00	4	18.25	4.00	14.25	218.00	4.00	214.00	1.25	15.00	Steven Shipp	
Princeton-Cordova	PC IA	30-Dec	0550	1600	13	29	Clear, Cloudy	0.00	Prtly Froz	E	5	12	9	3	4.00	3	33.00	12.00	21.00	318.00	15.00	303.00	5.50	56.00	Kelly J. McKay	
Quad Cities	DA IA	22-Dec	0300	1700	33	38	Cloudy	0.00	Prtly Open	E	5	15	21	8	16.00	10	68.00	26.00	42.00	538.00	26.00	512.00	10.00	67.00	Kelly J. McKay	
Rockford	ROCK	20-Dec	0700	1700	32	37	Cloudy	0.00	Prtly Open	NW	0	5	45	2	2.00	13-18	115.50	59.00	52.00	680.00	67.00	601.00	3.00	4.00	Daniel T. Williams	
Schaumburg	SCHA	3-Jan	700	1700	47	52	Cldy;fog,light rain	0.00	Prtly Froz	NW	5	10	25	0	2.00	4	33.00	5.00	28.00	328.00	10.00	318.00	1.00	0.00	Terrence N. Ingram	
Starved Rock State Park	SRSP	28-Dec	0545	1645	27	40	Cloudy	2.00	Prtly Froz	SE	0	20	15	2	4.00	7	57.75	30.75	27.00	423.00	34.50	388.50	3.25	30.00	John McKee	
Thorn Creek-Park Forest	TCPF	3-Jan	0630	1630	40	55	Cloudy	0.00	Prtly Froz	SW	15	25	32	17	20.00	13	96.75	52.00	44.75	502.25	50.25	452.00	1.50	0.75	Jim Kelly	
Van Patten	VANP	1-Jan	0600	1700	32	37	Cldy; fog; light mist	0.00	Prtly Froz	S	0	5	4	2	2.00	3	22.50	3.00	14.50	252.00	3.00	249.00	2.00	16.00	Kelly J. McKay	
Waukegan	WAUK	1-Jan	0530	1730	10	41	Clear	2-4	Prtly Froz	S-SW	10	25	38	39	78.00	14-20	107.50	87.00	20.50	474.50	72.50	402.00	2.25	6.00	Joel Greenberg	
White Pines	WTPN	21-Dec	0800	1700	18	34	Prtly Cldy	0.00	Prtly Froz	NW	2	10	8	4	8.00	4	27.00	12.00	15.00	252.00	11.00	241.00	0.00	0.00	Jerry McCormick	
Bloomington- Normal	BLOM	20-Dec	0730	1700	28	34	Cloudy	0.00	Prtly Froz	NW	5	15	13	0	0.00	5	41.00	28.00	13.00	217.00	19.00	198.00	0.00	0.00	Dale Birkenholz	
Bushnell	BUSH	3-Jan	0715	1715	45	63	Cloudy; light rain	0.00	Partly Froz	Var	0	15	11	0	0.00	6	41.75	17.00	24.75	330.50	16.00	314.50	0.00	0.00	Larry Hood	C
Champaign County	CHAM	20-Dec	0530	1645	33	35	Cloudy	0.01	Open	N	12	12	23	5	8.00	5-9	45.75	35.75	10.00	277.00	31.00	246.00	2.00	35.00	Helen M. Parker	
Chautauqua N.W.R.	CHAU	27-Dec	0600	1700	17	29	Clear	0.75	Prtly Froz	W	0	5	17	1	1.00	6-7	53.50	24.50	29.00	397.75	21.25	376.50	1.00	3.00	Richard G. Bjorklund	E
Chillicothe	CHIL	3-Jan	0700	1630	52	61	Prtly Cldy; fog; lght rai	0.00	Prtly Froz	SW	20	20	18	0	0.00	7	59.00	20.00	39.00	417.00	21.00	396.00	0.00	0.00	Tracy Fox	
Clinton Lake	CLLK	19-Dec	0515	1700	37	59	Clear	0.00	Prtly Froz	SW	0	5	16	0	0.00	7	62.50	40.50	22.00	367.50	43.50	324.00	3.00	33.00	Myrna Deaton	N
Crane Lake-Sangamon	CRLK	20-Dec	0700	1700	32	35	Cloudy	0.00	Open	NW	5	10	12	0	0.00	5	41.25	22.00	19.25	279.00	21.00	258.00	0.00	0.00	Robert Q. Randall	
Decatur	DECA	20-Dec	0515	1700	33	38	Cloudy	0.00	Prtly Froz	NNW	0	15	17	4	6.00	9	50.00	35.50	14.50	208.50	33.50	175.00	2.50	17.00	Myrna Deaton	
Forest Glen Preserve	FGPR	27-Dec	0630	1630	23	31	Cloudy; partly clear	0.00	Prtly Froz	Calm	0	0	23	1	2.00	13	72.00	51.00	21.00	285.50	19.50	266.00	5.00	8.00	Marilyn F. Campbell	
Humiston Woods	HMWD	30-Dec	0630	1700	30	38	Foggy, light rain	0.00	Open	SW	0	5	23	8	10.00	5	30.00	20.00	14.00	25.00	10.00	20.00	0.00	0.00	Joe Jobst	R
Meredosia Island	MERE	30-Dec	0645	1700	20	25	Cloudy; heavy snow	0.00	Prtly Froz	NW	5	10	8	0	0.00	4	35.50	15.50	20.00	240.00	15.00	225.00	0.00	0.00	Tony Ward	
Middle Fork River Valley	MFRV	1-Jan	0130	1715	15	44	Cloudy	0.00	Prtly Froz	SW	12	28	26	2	3.00	14-16	89.50	61.00	28.50	492.00	54.00	438.00	4.50	38.00	Steven D. Bailey	A
Peoria	PEOR	20-Dec	0700	1630	34	37	Cloudy	0.00	Prtly Froz	N	10	15	19	0	0.00	8	67.00	31.00	36.00	489.00	27.00	462.00	0.00	0.00	L. H. Princen	
Quincy,IL-Marion Co.MO	QUIN	27-Dec	0600	1600	17	30	Clear	1.00	Prtly Froz	NW	10	10	12	3	5.00	6	41.00	8.50	32.50	301.00	6.00	295.00	1.50	17.00	Ken Vail	T
Rushville	RUSH	3-Jan	0700	1700	40	55	Cloudy; fog, light rain	0.00	Prtly Froz	SW	0	10	3	28	50.00	1	7.00	3.00	4.00	19.00	4.00	15.00	0.00	0.00	Harold E Hedden	
Springfield	SPFD	21-Dec	0330	1700	30	37	Cloudy	0.00	Prtly Froz	E	5	20	17	5	10.00	7	59.50	27.50	32.00	369.00	35.00	334.00	4.00	53.00	H. David Bohlen	
Western Mercer	WMER	23-Dec	0445	1715	30	37	Cloudy	0.00	Prtly Froz	NW	0	3	8	0	0.00	3-4	33.75	10.25	23.50	274.50	12.50	262.00	4.25	57.50	Kelly J. McKay	
Baldwin Lake/Kaskaskia	BALK	20-Dec	0430	1830	30	42	Partly Cloudy	0.00	Open	W	12	12	20	2	4.00	5-8	52.00	34.00	18.00	358.25	24.25	334.00	2.80	1.00	Tim Dever	
Bird Haven Sanctuary-Olney	BIRD	20-Dec	0645	1700	28	39	Cloudy	0.00	Open	NW	5	10	18	0	0.00	9	58.50	28.00	30.50	420.50	23.50	397.00	0.00	0.00	Frank E. Storment	
Carlyle Lake	CALK	22-Dec	0642	1710	39	52	Cloudy	0.00	Prtly Froz	S	25	25	6	0	0.00	4	39.00	26.00	13.00	366.00	31.00	335.00	2.00	31.00	Dan Kassebaum	
Collinsville	COLL	21-Dec	0745	1630	29	40	Cloudy	0.00	Prtly Froz	S	17	30	9	0	0.00	5	43.25	21.00	22.25	364.50	20.50	344.00	0.00	0.00	L.B. Hendrickson	S
Crab Orchard N.W.R.	CROR	20-Dec	0635	1708	39	44	Cloudy	0.00	Open	N	10	20	13	0	0.00	6	59.75	24.50	35.25	384.00	17.00	367.00	1.50	20.00	Tracy R. Evans	
Cypress Creek	CYCR	19-Dec	0630	1715	32	62	Partly Cloudy; Clear	0.00	Prtly Froz	S	0	10	27	0	0.00	8-11	97.00	70.75	26.50	403.75	27.75	376.00	0.00	0.00	Judy K. DeNeal	O
Elsah	ELSA	3-Jan	7300	1300	60	65	Partly Cloudy	0.00	Open	SE	0	5	11	0	0.00	3	16.50	0.00	16.50	74.00	0.00	74.00	0.00	0.00	Taylor A. DeLaney	
Horseshoe Lake	HSLK	3-Jan	0615	1800	52	59	Cloudy	0.00	Open	S	12	18	18	0	0.00	10	84.50	48.00	36.50	400.00	40.00	360.00	2.00	0.00	Vernon Kleen	C
Jackson County	JACK	1-Jan	0645	1715	29	47	Clear; Partly Cloudy	0.00	Open	W	25	25	23	2	5.00	7	73.00	32.75	40.25	481.25	25.25	456.00	2.75	22.50	Rhonda Monroe	
Kaskaskia Audubon	KASK	28-Dec	0715	1600	45	5	Prtly Cloudy	0.00	Open	SSW	8	12	0	0	0.00	0	8.75	2.67	6.08	44.30	1.00	43.30	0.00	0.00	Joe Merkelbach	L
Lincoln Trail State Park	LINC	20-Dec	0700	1600	37	47	Cloudy; foggy	0.00	Open	NW	5	10	21	1	3.50	8	40.00	9.00	31.00	329.00	8.00	321.00	0.00	0.00	Charlotte Connerton	
Mermet Lake	MRLK	1-Jan	0700	1630	21	45	Clear; Partly cloudy	0.00	Open	Var.	10	20	2	0	0.00	1-2	15.00	5.50	9.50	109.00	4.00	105.00	0.00	0.00	Frank Bennett	H
Newton	NEWT	2-Jan	0550	1700	36	51	Cloudy; light rain	0.00	Open	S-SE	15	25	11	0	0.00	4	29.00	14.00	15.00	306.00	20.00	286.00	0.50	10.00	Jeffery W. Walk	
Pere Marquette Park	PEMR	20-Dec	0800	1630	31	40	Partly cloudy; cloudy	0.00	Prtly Froz	W	5	15	35	0	0.00	10	67.25	33.00	34.25	266.25	34.25	232.00	1.50	5.00	Bob Thomas	
Rend Lake	RDLK	20-Dec	0645	1715	38	48	Cloudy	0.00	Open	WNW	10	25	9	0	0.00	6	60.00	38.00	22.00	439.50	35.50	404.00	7.50	106.00	Robert Danley	
Union County	UNION	4-Jan	0615	1730	53	65	Cloudy	0.00	Open	SSW	5	12	21	0	0.00	7-10	82.50	54.50	28.00	470.50	42.50	428.00	2.50	0.00	Vernon Kleen	
Warbluff Valley Sanctuary	WRBV	2-Jan	0630	1700	45	58	Cloudy; light rain	0.00	Open	SW	5	10	23	1	4.25	7	57.00	27.25	29.75	336.00	22.00	314.00	0.00	0.00	Pat Brown	
					31.85	41.41							1167	228	369.75		3494.50	1926.42	1562.83	21237.30	1766.00	19033.30	141.30	973.25		
					AvLo	AvHi							Total	Total	Total		Total			Total			Total	Total		

Species	WAUK	EVNS	CHIU	CHIL	CALU	MCHE	BARR	FERM	LISL	TCPF	JOLI	MOWI	DEKA	ILLI	ROCK	KISH	SRSP	FREE	WTPN	PRIN	TOTALS
Common Loon		1 nc																			
Pied-billed Grebe					4						1	30									
Horned Grebe				1	3																
Double-crested Cormorant		[2*-cw]	1		11							4								2	
Great Blue Heron	3	4	3		5	6	7 hc	29 hc	25	1	17	15		4	5	2	21			25	
Black-crowned Night-Heron			2		3				1												
Greater White-fronted Goose		1* nc													1*						
Snow Goose	1	1	1				1	6				2		7	6			1			
Ross's Goose										1*											
Ross's Goose X Snow Goose															1*						1
Canada Goose	15683	13149	911	763	939	14063	22517 hc	42432	15390	1956	1182	11889	536	4626	12451 hc	3552	292	669	178	263	
Mute Swan	13	2			141	3	1	5	4	2	1										
Tundra Swan	1													4* hc gd	3*						
Wood Duck	2	3	4		1	2	2		8		3			1	1	4 hc				2	
Gadwall	22	4	10		36				87		52	148		10	2		8				
American Wigeon	7		5		6	1		1			5	30		4	1						
American Black Duck	116	21	15		31		1	63	16		12	110		284	24	22					
Mallard	2087	1282	1202	158	1935	890	1425	2927	2554	211	979	30981	349	30341 hc	1337	1406	610	107 ~	38	44	
Mallard X Black Hybrid															2	2					4
Mallard X Wood Duck			1																		1
Blue-winged Teal									4* gd		1* gd		1 nd				10* hc				
Northern Shoveler		24	1			24		4			1	1									
Northern Pintail	2	1			7				1		1			6 hc							
Green-winged Teal	2		1					1 hc	16		7			2							
Canvasback	1	1									2	14			1						
Redhead	8		1	1	2							1									
Ring-necked Duck	cw	1	5		24		12 hc				128										
Greater Scaup	376	1210	1	330																	
Lesser Scaup	10	6	8	12	84	2					16	30		12	1					7	
scaup sp.	58	156			500																
Harlequin Duck	1																				1
Surf Scoter	cw			cw																	
White-winged Scoter		2		cw											2						2
Black Scoter	cw																				[1-cw]
Oldsquaw		44																			
Bufflehead	97	57	1	18	16						7	30		3	1						
Common Goldeneye	235	448	20	98	147	27	71	14	16		26	387		834	6		73			25	
Hooded Merganser	20	5	1	1	4		6	1			8	73		13	1	3 hc					
Common Merganser	103	10	1	14	14			1	9		35	3109		5508		8	13				
Red-breasted Merganser	103	41	15	239	266				1			10									
Ruddy Duck	5	2	2		2						2	62		6							
duck sp.	22						3														
Bald Eagle												1	1	1	1	3	24 hc			52	
adults													1			2	10			39	
immatures												1			1	1	12			13	
unknown														1			2				
Northern Harrier		1			1			12	1	13	4	3		19	2		2				
Sharp-shinned Hawk	3	3				2	1	1	3		1	1				3	1	1	2		
Cooper's Hawk	7	6	2		4	7	4	11	6	1	1			3 hc	8	4	2				
Northern Goshawk										1						1*					
accitpiter sp		1					1	2								1					
Red-shouldered Hawk		1					1		1								1*				
Red-tailed Hawk	51	59	9		62	55	49	99	118	59	30	50	15	50	104	63	68 hc	40	4	29	
Rough-legged Hawk	2	1				1		1	1	2	2	3	2	1	2	7	4	1	2	1	
American Kestrel	12	23	4		37	11	33	34	33	17	14	25	2	23	28	21	31 hc	23	3	13	
Merlin										1*						1*					
Peregrine Falcon		1	1	1	2																
falcon sp.										1											1
hawk sp.		1 buteo					1 (buteo)	1		2					2 buteo						
Ring-necked Pheasant					1	29		23	2	1	1	12	1	8	22	5	2				

Species	WAUK	EVNS	CHI U	CHI L	CALU	MCHE	BARR	FERM	LISL	TCPF	JOLI	MOWI	DE KA	ILLI	ROCK	KISH	SRSP	FREE	WTPN	PRIN	TOTALS
Wild Turkey								10					1	9	7	7	69 hc				
Northern Bobwhite																2					
Sandhill Crane	cw								(5 - cw)												
American Coot	47	8	2	58	648		cw		1		20	657		9	4	1					
Killdeer								1									4 hc				
Common Snipe		3			1		cw	1							1					2	
Bonaparte's Gull	1	9	5																		
Ring-billed Gull	1375	1689	658	965	1744	160	118	386	874	133	502	927	2	149	23	6	576 hc		6	938	
Herring Gull	373	685	144	100	2680	2	2	138	65	5	40	336		854	5	4	90			84	
Thayer's Gull	6	1	1	2																	
Lesser Black-backed Gull				1	1																
Glaucous Gull	1	1		cw								1									
gull sp	20	689		200			39	118		20					3	2		1			
Rock Dove	134	998	1500	436	766	603	112	727	1370	511	397	116	143	257	1353 hc	986	157	581	185	94	
Mourning Dove	424	301	258 hc	1	456	151	236	683 hc	358	240	425	101	95	33	363	466	126	122	21	33	
Eastern Screech-Owl	cw	8	4			3	1	1	29	2	1			6	2	1	2				
Great Horned Owl	9	10	6	1	3	8	7	30 hc	23	9	5	2	3	12 hc	22	10	5	4		1	
Snowy Owl	1			cw										1							
Barred Owl					cw - dead					1				1	11	4	1	1			
Long-eared Owl		1					3	3		3						2 nc					
Short-eared Owl		2	1					1													
Northern Saw-whet Owl									cw	1											
owl sp.																1					
Belted Kingfisher	2	5	2		4	6	3	15	6		3	8	2	4	8	13	3	2	1	6	
Red-headed Woodpecker	1	3	1		16			2	5	9	2	2			26	2	2				
Red-bellied Woodpecker	25	88	21		23	49	28	68	85	44	13	31	13	25	108 hc	84	36	11	7	21	
Yellow-bellied Sapsucker	1	1				1		cw	1		1			1	cw						
Downy Woodpecker	69	176	114	7	77	121	78	226	199	67	53	54	33	62 hc	240	188	101	52	8	24	
Hairy Woodpecker	24	54	37		7	10	11	27	29	5	5	6		12 hc	30	44 hc	5	2	1	1	
Northern Flicker	9	8	3		5	5	6	40 hc	35	31	2	12	2	13 hc	23	17	14	6	2	7	
Pileated Woodpecker									cw						1	1		1			
Northern Shrike						1		1	1	3		1			1						
Blue Jay	66	111	38		212	171	62	90	157	163	24	52	30	32	226	165	61	80	12	43	
American Crow	675	3111	915	13	668	688	6951 hc	1156	1021	1122	208	131	847	156	3087	2785	260	327	156	71	
Horned Lark	67	3	2			6	cw	5	3	62	4	81	203	336	44	69	303	37	14	20	
Black-capped Chickadee	406	553	342	13	203	337	350	610	595	178	108	85	62	107	401	466 hc	173	89	32	51	
Tufted Titmouse		1			49			8	22	25	6	5	3	39	25	60 hc	59	7	9	22	
Red-breasted Nuthatch	26	33	3		9	43	20	28	30	38	15	8	6	5 hc	46	36 hc	3	9	4	2	
White-breasted Nuthatch	49	87	31		31	69	25	86	141	56	23	27	18	49 hc	161	171	41	32	12	18	
Brown Creeper	7	22	49			6	2	52 hc	29	7	24	41	8	16	65	96 hc	28	4	2	5	
Carolina Wren	1	1	1				1*			2				1			2	1			
Winter Wren	2				1			1	1			[1-cw]				2	2				
Golden-crowned Kinglet	2	13	9	3	9	6	cw	9	1	3		3		1	16	26 hc	1				
Ruby-crowned Kinglet								3 hc				1	2 nd								
Eastern Bluebird	2	3				1	3 hc		2								3			3	
Hermit Thrush	2	12 hc m	2				1	1								[cw]					
American Robin	773	1545	59	1	20	23	72	140	711		2	[2-cw]	8	1	15	11				1	
Varied Thrush											[cw-1* ph]										[1-cw]
Gray Catbird									1*					1* gd							
Northern Mockingbird					1									1 hc							
Brown Thrasher		2																			
European Starling	2897	3512	1950	71	1207	1291	1121	3521 hc	3995	4471	3452	2679	674	1699	2928	3495	8142	2188	103	417	
American Pipit		1* nc ed																			
Cedar Waxwing	65	45	38			155	225	471 hc	490	55	9				34	199		5			
Orange-crowned Warbler												1* ph				1*					

Species	WAUK	EVNS	CHI U	CHI L	CALU	MCHE	BARR	FERM	LISL	TCPF	JOLI	MOWI	DE KA	ILLI	ROCK	KISH	SRSP	FREE	WTPN	PRIN	TOTALS
Yellow-rumped Warbler	30	32	48				6* hc	17	19	4					cw	17 hc	1				
Palm Warbler		1* nc gd																			
Common Yellowthroat					1*										1*						
Yellow-breasted Chat									1* ph												1
Spotted Towhee							1*														
Eastern Towhee		1																			
American Tree Sparrow	245	947	103	1	311	285	804	756	613	464	546	621	149	502	1145	260	616 hc	211	4	63	
Field Sparrow															1	2*					
Savannah Sparrow		2* hc																			
Fox Sparrow		2	1																		
Song Sparrow	18	60	17		35	11	78	90	50	27	31	24	9	14	162	33	40	12		44	
Lincoln's Sparrow												1*									
Swamp Sparrow	10	34 hc	6		7	4	10	18	20		3	1		3	37	7	35 hc				
White-throated Sparrow	38	64	39		2	7	43	34	70	11	10	8	1	1	17 hc	13	18		3	4	
White-crowned Sparrow	1	1	1		1		12	14		8	3	3		3	1					27	
Dark-eyed Junco	503	1092	398		524	715	949	1155	854	338	474	625	272	333	1862	1032	825	242	14	42	
Oregon form										4		1									5
sparrow sp.							2									2					4
Lapland Longspur	18												12	6		147	7				
Snow Bunting			6					5		40		75	39	148		3	1				
Northern Cardinal	218	301	216	6	157	143	218	351 hc	300	240	86	82	71	68	307	299	210 hc	69	6	63	
Red-winged Blackbird	2500	8	2		1616		17		123	8	25	10085		424	3	1	1015				
Eastern Meadowlark	1	1								1	13		1				21				
meadowlark sp.																1					
Rusty Blackbird												7									
Common Grackle		53	cw		13	2		1	5	52	4	4220		1738 hc			5685	5		9	
Brown-headed Cowbird	2				392	9			1	2	2	2034	2	96	cw	5	140	[5-cw]			
blackbird sp																1	49000				
Pine Grosbeak						2*															2
Purple Finch	2	10	3		6	12	2	1	5	11		[1-cw]	1	17 hc	16	3	2				
House Finch	219	281	52		218	164	157	250	92	216	183	158	146	63 hc	649	602	28	87	3	28	
Red Crossbill																4					
White-winged Crossbill			1						32*						21 hc	[cw]					
Common Redpoll		27	5		27		30	2		7		17									
Pine Siskin	14	93	9				32	119	192	46	101	81		24 hc	12	15	28	28		25	
American Goldfinch	223	739	156	6	244	177	119	364	314	153	57	80	28	157	491	253 hc	113 hc	50	8	48	
House Sparrow	762	997	2140	11	738	590	771	811	1020	862	509	937	267	367	924	1441	869	1119	43	470	
exotics: [Monk Parakeet]			[2]	[cw]	[16]																[18]
[Collared-Dove]											[121]										[121]
Total species	**77**	**90 hc**	**73**	**30**	**69**	**53**	**55**	**68**	**69**	**58**	**68**	**70**	**41**	**71**	**68**	**67**	**62**	**38**	**30**	**44**	
Total individuals	**31419**	**35114**	**11627**	**3532**	**17421**	**21160**	**36864hc**	**58315**	**32188**	**12029**	**9930**	**71449**	**4060**	**49626**	**28941 hc**	**18672**	**70085**	**6227**	**883**	**3150**	

	Northern							*Central*												
SPECIES	VANP	SCHA	CL IA	PC IA	DA IA	ANDU	MU IA	MERV	FGPR	CHAM	HMWD	BLOM	CLLK	DECA	CHIL	PEOR	CHAU	CRLK	SPFD	BUSH	TOTALS
Pied-billed Grebe	1												9	1		2	1		47 hc		
Horned Grebe		1											1	2					1		
Eared Grebe																			1*		1
American White Pelican					1^													1*			
Double-crested Cormorant					10									1	5 hc		6				
Great Blue Heron	1	3	1	2	2		17	8	8	3	2		19 hc	30	10	16	38	35	6	cw	
Turkey Vulture								6													
Greater White-fronted Goose												cw	196 hc	68 hc			251*hc	2			
Snow Goose										21		1	3	2			1		cw		
Canada Goose	80		1436	3	939	244	721	1423	205	406 ,	173	2126	845	454	996	1223	2968	963	480	128	
Mute Swan																	5		4		
[Trumpeter Swan]											[5]						[2]	17 y,nn-c-HC			
Tundra Swan			200^														44* hc		3 imm		
Wood Duck					1									3	3		15	10	4		
Gadwall			10		12		21	46 hc					6	28	17 hc	18	81	168	200 hc		
American Wigeon					2							2	15	6			8	29	1		
American Black Duck			34		12			49 hc				6	39	34	30	11	374	81	19		
Mallard	195	4	1149	54	1638	85	443	1121 hc	18	99	48	780	2690	1241	4004	1058	29706	20292	1315		
Mallard X Wood Duck								1													
Blue-winged Teal				2*													2*				20
Northern Shoveler			1										1		3	4	76	58	10		
Northern Pintail				9	2		2						6	[cw]			46	57	8		
Green-winged Teal							2						2	1		1	132	37	11		
Canvasback			2				1						12	2			5	22	1		
Redhead					3							4		5							
Ring-necked Duck	1					8		[1-cw]					46 hc				9	86			
Greater Scaup					[1 - cw]									9				6			
Lesser Scaup	2		8		70	5	3	3		5		2	92 hc	57		26	24	64	24		
Surf Scoter											^			1^ nc							1
Oldsquaw					1*			1													
Bufflehead	3		1	1	20		3	1					18	3			12	1	22 hc		
Common Goldeneye	170		1152	19	27	16	21	[cw]				1	258	283	18	1	26	25	250		
Hooded Merganser					1								35	6		4	32	3	26		
Common Merganser	10		1100	68	133	14	90	3				7	30	2	213	21	543	89	40		
Red-breasted Merganser							1*						10			2	5		2		
Ruddy Duck		1	1		[1-cw]		1	3						6			7	16	9 hc		
duck sp.									4												
Bald Eagle	3	10	49	11	47	16	179	1	1			1			70	12	74	69		1	
adults	2	9	31	9	38	11	132	1	1						53	12	35	43		1	
immatures	1	1	18	2	9	3	47					1			17		39	26			
unknown						2															
Northern Harrier					1		5	2	2	1	8		11	1	4	1	8	8	3	4	
Sharp-shinned Hawk			2	1	1	1		2	2	2				1	1		1	4	2		
Cooper's Hawk	1	1	4		2	2	2	7	2	1		2	3		3		5	2	1	2	
Northern Goshawk		cw											1								
accipiter sp.								2	2								1			1	
Red-shouldered Hawk								1	2				2								
Red-tailed Hawk	7	62	55	24	67	16	67	48 hc	50	26	13	18	55	18	78 hc	41	75	50	44 hc	10	
Rough-legged Hawk		4	12	1	1	8			2	2	2	1	1	1	1	2	8	3	1	3	
American Kestrel	10	19	16	16	30	12	40	18	29	20	15	12	29	14	33	37	18	10	31 hc	14	
Merlin			1*																		
Prairie Falcon													1^								1
hawk sp.																	2				
Ring-necked Pheasant		1	2	2	1	6	91	1	1	32	18	2	43	11	1		12	1	1	9	
Wild Turkey		85	21	138	7	6		21 hc	2		20		7		21 hc		1	2	1 nc	1	
Northern Bobwhite					8		2						35 hc		14		1	14	10	6	
Sora								1^													1
American Coot					3		2					6	30	59		2	19	139	11		
Sandhill Crane															2^						2

		Northern												*Central*								
SPECIES	VANP	SCHA	CL IA	PC IA	DA IA	ANDU	MU IA	MERV	FGPR	CHAM	HMWD	BLOM	CLLK	DECA	CHIL	PEOR	CHAU	CRLK	SPFD	BUSH	TOTALS
Killdeer			4		4								8	1	1	7	1	2	2		
Common Snipe	1	5			2			1		1					2			1			
Bonaparte's Gull													18	1			4		200		
Ring-billed Gull	24		14	109	1435	221	578	122		20		7	1866	3800	716	3752	1050	543	3000		
Herring Gull	63		24	46	345	14	212	1		1			13	22	48	696	59	35	10		
Thayer's Gull	1						1*														
Lesser Black-backed Gull																			[1 -cw]		
Great Black-backed Gull	1																				1
gull sp																650		2		6	
Rock Dove	321	185	279	86	1369	28	272	158	623	582 ,	60	167	32	48	73	257	42	28	154	5	
Eurasian Collared-Dove										1*											
Mourning Dove	28	59	180	35	256	95	736	66	128	190	70	41	172	74	68	320	200	169	912 hc	119	
Eastern Screech-Owl	1	cw	6	1	6	6	1	21	11	4	3		6	2	1			1	8		
Great Horned Owl	4	5	18	7	9	9	13	7	17	8	5	7	28 hc	7	[1 - cw]		5	10	23	5	
Barred Owl	1	2	1		7	3	4	7	8			3	20 hc	1		2	5	11	3		
Long-eared Owl			1				2	2		[1-cw]		1									
Short-eared Owl						1		1													
Northern Saw-whet Owl								2 hc					1								4
Belted Kingfisher	1	1	1	3	4	4	2	6	10	2	3	1	14 hc	7	9	5	4	4	2		
Red-headed Woodpecker		4	9	22	8	11	7	4	26		1		6	1	9	1	17	12	4	10	
Red-bellied Woodpecker	13	33	42	20	50	31	52	30	119	35	7	14	57	50	94	52	76	65	78	30	
Yellow-bellied Sapsucker		2	1		2		1			1	1		1	1					[cw]		
Downy Woodpecker	29	55	78	40	125	45	103	75	105	85	25	56	97	52	115 hc	89	84	79	92	41	
Hairy Woodpecker	4	7	12	15	17	13	18	11	18	1	8	3	14	4	13	14	13	26	6	3	
Northern Flicker	2		13	5	9	20	27	24	18	21	5	17	74	38	26	21	38	98	54	9	
Pileated Woodpecker			2	1	6	1	5	7	28	2				1		2	4	6	5		
Eastern Phoebe			1*																		
Loggerhead Shrike																		2			
Northern Shrike		cw	1																		9
Blue Jay	30	179	236	108	128	100	202	108	277	87	50	39	210 hc	114	62	80	398	98	131	80	
American Crow	517	458	304	85	1444	128	290	167000	13079	320	150	3034	717	2422	198	303	1474	461	1600	136	
Horned Lark	61	13	217	8	13	125	124	421	4	116	60	37	260	10	30		47	21	17	2	
Carolina Chickadee								106	166	53											
Black-capped Chickadee	57	110	238	114	273	101	193	1			30	103	157	115	269	280	66	78	200	42	
Tufted Titmouse		13	53	18	30	18	31	122	210	. 24		24	60	54	124	86	66	59	97	26	
Red-breasted Nuthatch	5	2	12	6	8	4	6	12 hc	15	17	1	13	25	3	1	6	28	21	16	2	
White-breasted Nuthatch	7	53	111	30	83	39	83	60	137	15	20	14	102 hc	19	87	68	58	69	52	15	
Brown Creeper	8	4	22	12	29	11	12	14	26	28	1	21	16 hc	20	12	17	14	10	37	2	
Carolina Wren		cw	3		2		3	8	25	14	2	1	20	7	4	13	13	25	52		
Winter Wren			1			1		2		4		2	7 hc	6		1	1	2	2		
Sedge Wren													1* nc								1
Marsh Wren													1* nc								
Golden-crowned Kinglet		4	2	3	12	1	2	4	33	4		4	15	2	2	1	48	9	14		
Ruby-crowned Kinglet										1			1		2		1	1	1		
Eastern Bluebird		2				4		1	10				4		3		11	18	3	4	
Hermit Thrush						1*	2*	1		5			4*nc						6 hc		
American Robin		1	2	1	4			4	4	45	5	2	1	12	2	13	1	3	66		
Gray Catbird																			[1 -cw]		
Northern Mockingbird										1		1	1	1	3		3		6	2	
Brown Thrasher												1									
European Starling	300	672	787	1159	2965	591	1876	3308	1123	3828	960	430	2930	1461	1511	1842	624	412	1324	1207	
Cedar Waxwing		21			24	7	30	9	3	1		7	2	13	81 hc	9	53	21	91		
Orange-crowned Warbler																			1*		
Nashville Warbler																			1*		1
Yellow-rumped Warbler	1		5			1*	1*	11	1	1	1		19 hc	26 hc	2		2	1	2		
Palm Warbler								1*													
Common Yellowthroat														1* nc				1			
Wilson's Warbler																			[1 - cw]		[1-cw]
Spotted Towhee																	1* nc				2

	Northern							*Central*													
SPECIES	**VANP**	**SCIIA**	**CL IA**	**PC IA**	**DA IA**	**ANDU**	**MU IA**	**MFRV**	**FGPR**	**CHAM**	**HMWD**	**BLOM**	**CLLK**	**DECA**	**CHIL**	**PEOR**	**CIIAU**	**CRLK**	**SPFD**	**BUSH**	**TOTALS**
Eastern Towhee					1*					2	1							1			
American Tree Sparrow	69	107	993	260	984	427	1560	556	186	716	40	194	884 hc	520	365	219	1069	562	335	130	
Field Sparrow	1*			50?*qd	2*			4	6		8		4	3			6	5	4		
Vesper Sparrow										[1* - cw]								1			
Savannah Sparrow										2			2				2				
Fox Sparrow									9	1			4	2				14	25		
Song Sparrow	9	8	44	42	14	25	67	49	47	75	3	15	68	82	45	98	102	174	53	18	
Lincoln's Sparrow			1*																		
Swamp Sparrow	2		10	58	6	2	4	25	6	23		7	29	32	11	6	29	128	10		
White-throated Sparrow		2	4	6	34	9	8	9	12	53	2	18	38	19	18	34	27	166	200 hc	3	
Harris's Sparrow	1* imm				1* imm						[25? nd]										
White-crowned Sparrow	6	cw					1		1	5			2	8	44 hc		5	69	3		
Dark-eyed Junco	114	229	1136	278	613	342	1284	468	558	618	170	117	503 hc	409	505	428	1979	542	656	161	
Lapland Longspur	9		21	3		3	1	988 hc		3			7	[cw]	25 hc			20	138		
Snow Bunting			73	5																	
Northern Cardinal	44	114	214	122	401	162	354	160	226	224	50	43	200	203	201	188	218	143	290	65	
Red-winged Blackbird	1			2	1671		15	2	5	17			34	6	40	170	2892	711	822		
Eastern Meadowlark				1*				2					2	1			[cw]				
meadowlark sp.			2																		
Rusty Blackbird					27					150			3				3	32	2		
Brewer's Blackbird											[15 nd]										
Common Grackle				1	30		5	5		2	15	2	3	4	70	86		3	500	[4-cw]	
Brown-headed Cowbird		cw	16		29	2	240	51		81	5		31	1	15	1	32	4	500	20	
blackbird sp.								45			160										
Baltimore Oriole					1*(in IA)																1
Purple Finch	1	34	25	3	1	24	27	30	2		7		2	2		1	8	5		3	
House Finch	54	97	87	128	317	5	309	132	110	299	55	19	16	55	109	101	1	3	133 hc	21	
Red Crossbill				1*			5* (in IA)				-						1				11
White-winged Crossbill							30* (in IA)												13		97
Common Redpoll			1*										2								118
Pine Siskin		cw	25		39	2	45	32	12	82	3		184 hc	29	1	38	49	1	159		
American Goldfinch	25	131	145	182	156	96	210	112	171	124	42	21	170	177	141	127	281	954	240 hc	28	
House Sparrow	182	614	844	566	2373	588	2011	734	410	915	540	226	455	1025	735	846	660	765	604	601	
Eurasian Tree Sparrow				1		5	21										62	459	25		
Total Species	**51**	**44**	**72**	**57**	**77**	**58**	**71**	**75**	**55**	**64**	**48**	**54**	**93 hc**	**82**	**66**	**59**	**90 hc**	**90 hc**	**90 hc**	**41**	
Total Individuals	**2482**	**3417**	**11578**	**3994**	**18411**	**3765**	**12800**	**177911**	**18315**	**9528**	**2753**	**7687**	**14174**	**13324**	**11420**	**13412**	**46579**	**29529**	**15573**	**3013**	

	Central												*South*									
Species	RUSH	MERE	WMER	QUIN	LINC	NEWT	BIRD	KASK	BALK	RDLK	JACK	CROR	CYCR	CALK	UNION	HSLK	MRLK	COLL	WRBV	PEMR	ELSA	TOTALS
Common Loon										1												2
Pied-billed Grebe						68	27		9	78 HC	24	60		2	1			6	5	3		379
Horned Grebe							2		1	3				2								17
American White Pelican			1*[IA]	2																16*		21
Double-crested Cormorant				3						3		1		50 hc						2		99
American Bittern														1*								1
Great Blue Heron		68	28	26	2	54	10		39	69	24	81	7	181 HC	115	67	24	14	9	48	31	1165
Great Egret											1*											1
Black-crowned Night-Heron																		1				7
Black Vulture											6		101				7		98			212
Turkey Vulture					51	5	39				4	1	114			9	9		44			282
Greater White-fronted Goose						35			31	53 hc			10	635 hc	350 hc	500 hc	4			3*		2140
Snow Goose		5			2	1	5		653	18188 hc	32	193	10245	183	2000	1076	255			10840		43732
Ross's Goose										4 hc					6							11
Canada Goose	181	2340	515	1051	729	2719	111		1804	1182	1067	9500	1244	71	21000	25000	693	682	30	1062	158	250393
Mute Swan																		1				182
[Trumpeter Swan]																						14
Tundra Swan			1*															1		[1 - cw]		257
Wood Duck			2							3		2	13	11 hc	20	4						124
Gadwall		125	96			19			184	67	71	278	429	13	100	32		6		16		2422
American Wigeon			1			7	2		8	16	5		66	81 hc	80	17	7			3		416
American Black Duck			5			406				178	2	41	240	81	60	35	9			2		2463
Mallard	1	242	800	571		5496	99		586	863	621	8755	25028	31383 hc	4000	3000	1052	339	1	1733	44	231417
Northern Shoveler		10				10	45		4	48 hc	29	91	387	26	123	155 hc	8	20		274		1438
Northern Pintail		3	2			2			4	17		29	246	224 hc	83	137	1			11		917
Green-winged Teal		1	1			98	3		25	24	8	165	432	129	200	45 hc	7	2		40		1395
Canvasback		74		1		59	2				8	4	8	4	140hc		3	7		32	1	407
Redhead							1		19	5	2	1	157	1			5			1		217
Ring-necked Duck				3		2	3		4	46		90	3852HC	1	75	27	47	1		8		4479
Greater Scaup										3*												1935
Lesser Scaup		7	1	4		422	7		8	27	59	104	365	48	50	49	305	2		70	3	2104
scaup sp.							1		11													726
Oldsquaw							10							1								57
Bufflehead						108	9		3	16	2	91	4	13			2	3				566
Common Goldeneye		19		2		88	5		7	736 hc		1		778			8	28		55	4	6400
Hooded Merganser						126	1		9	13		684	6	125 hc	19	2	5	3		7		1242
Common Merganser		70	10	8		52	3		13	10		15	2	28				7				11431
Red-breasted Merganser						32				3		1		3								734
merganser sp.							2															2
Ruddy Duck			5			215	50		6	19 hc	7	47	20	10	42		4	215		2		768
duck sp.							11		969													1009
Bald Eagle	4	62	78	47		1			2	4	9	18	7	4 hc	16	44	1	4	2	75	48	1053
adults	4	30	51	34		1			2	2	6	10	3		8	25	1	4	2	31	19	663
immatures		32	27	13						2	3	8	4		8	19				44	28	380
unknown														4							1	10
Northern Harrier		16	9	1	6	31	4	4	34	41 hc	6		94	6	7	6	2	1	33	5		423
Sharp-shinned Hawk	1	2	1	2	1		6	1	1	6	4	2	2	6 hc	2	3		1	5		1	89
Cooper's Hawk		1				1		1	1	4	1	1	3	[cw]	1	1		1		1	1	124
Northern Goshawk			1*																			4
accipiter sp.							2															13
Red-shouldered Hawk								1	1	1	2	1	13	1	14	6	4	1	2			56
Red-tailed Hawk	9	51	46	45	28	22	34	7	80	60	55	58	96	53 hc	71	51	11	44	44	70	17	2790
Rough-legged Hawk			2	1		1			1	3 hc	2		1			1		1	3			102
Golden Eagle															1	1					2	4
American Kestrel	9	8	10	24	17	18	27	12	35	35	51	23	69	28 hc	43	55	27	44	47	16	6	1414
Merlin		1											1*gd									5
Peregrine Falcon																		1				6
hawk sp.							2		1													12
Ring-necked Pheasant			12		1	1								15 hc								371
Greater Prairie-Chicken						103																103
Wild Turkey		1	38						2	4		3	4	[cw]	1		4		1	88		602
Northern Bobwhite	4	54		12	1	2	25	6	44	21		1	19	20	3	5	9	6	50	20	2	405
American Coot						14	198		167	40	842	274	200	20	8	1	2	10		82		3575
Killdeer			1	2					11	20	10	8	2	37 hc	22	54	20	2	2	20		246

	Central												*South*									
Species	RUSH	MERE	WMER	QUIN	LINC	NEWT	BIRD	KASK	BALK	RDLK	JACK	CROR	CYCR	CALK	UNION	HSLK	MRLK	COLL	WRBV	PEMR	ELSA	TOTALS
Greater Yellowlegs																	cw					[1-cw]
Least Sandpiper																	3* ed					3
Pectoral Sandpiper		5*																				5
Dunlin																	2* ed			1*		3
Common Snipe			1							7 hc			7	13 hc	22	1				6		76
American Woodcock								[1? nd, dd]														1 nd
jaeger sp.										1*												1
Bonaparte's Gull						5			28	2982 hc		9		44				1				3307
Ring-billed Gull		245	263	405		389	4		183	4062	477	267	44	6409	34	194	33	1517	6	317	183	43767
Herring Gull		21	26	56						18		1		63		2	2	8		3	3	7399
Lesser Black-backed Gull														1								3
Glaucous Gull																					1	4
gull sp							1		28				30							25		1834
Rock Dove	1	9	96	91	463	49	124	5	46	21	139	8	8	58	111	13	35	354	4	27	14	17871
Eurasian Collared-Dove														2*NC								3
Mourning Dove	57	240	26	149	117	202	438	10	7	139	189	124	170	386 hc	305	335	9	245	304	31	4	12298
Barn Owl													3*									3
Eastern Screech-Owl		2	3	1			1			2	1	2	3	4	5	6			3	1		172
Great Horned Owl		7	25	3	1	2	4		7	12	4	2	6	9	18	2		3	4	1		467
Barred Owl		1	8	4	2	2	3		8	4	1	1	14	3	7	6	1	3	2	2		169
Long-eared Owl			1	1						1												21
Short-eared Owl			1			38 HC	1			3		1	17									67
Belted Kingfisher		4	4	4	1	4	2		3	1	7	4	4	2	13	3	4	2		7	2	247
Red-headed Woodpecker	6	3	50	1	57	7	42	8	88	20	22	9	124	23 hc	262	88	26	16	5	59	2	1141
Red-bellied Woodpecker	10	76	59	60	43	30	56	11	66	48	54	73	90	62 hc	161	163	19	42	54	166	46	3117
Yellow-bellied Sapsucker		1	1				2		2	1	4	1	11		31	15	cw	2	6	2	2	97
Downy Woodpecker	28	72	112	64	38	26	62	7	19	58	41	33	138	60 hc	195	156	6	50	57	94	21	4756
Hairy Woodpecker	2	16	30	7		11	23	7	14	18	7	5	76	25 hc	44	29	2	2	13	29	2	892
Northern Flicker	2	60	37	11	9	4	21	2	24	33	54	48	172	17	213	131	16	21	47	118	29	1807
Pileated Woodpecker		11	10	2	4				8	1	17	7	75	1	76	40	2	3	34	26	4	394
Eastern Phoebe											2					1*						4
Loggerhead Shrike				1*		3	16		3	2	3		5	1	3	4	1	1	5	1*		51
shrike sp			1*																			1
Blue Jay	33	129	124	145	256	102	309	60	103	254	170	300	251	271	387	224	19	95	399	162	42	8347
American Crow	74	1298	11378	143	665	132	165	23	119	518	249	313	116	138	202	200	23	180	181	424	93	243449
Horned Lark	1	744	5	145	5	463	72		28	83	91	1	14	34	103	311	15	16	4	26	17	5023
Barn Swallow														[1?] nd,dd								1 nd
Carolina Chickadee					59	57	168	17	140	104	210	79	306	168 hc	370	263	18	55	79			2418
Black-capped Chickadee	33	114	280	114														13		146	115	8403
Tufted Titmouse	27	72	68	71	70	76	143	21	86	60	87	40	227	90 hc	263	162	33	32	66	116	69	3334
Red-breasted Nuthatch	5	5	16	2	2	2	6		7	3	4	4	11	4	27	15	1	1			2	684
White-breasted Nuthatch	16	51	91	43	27	37	49	5	45	19	38	19	112	21 hc	185	124	12	14	44	93	34	3328
Brown Creeper		5	22	4		1	3	2	15	8	11	4	16	4	46	21	1	1	13	2	2	960
Carolina Wren	3	28	4	20	4	3	17	1	30	40	45	16	214	43 hc	181	140	10	12	24	26	13	1076
House Wren										1*	1				2*hc	10* HC						14
Winter Wren		1	2							1	3	1	1		30	29	1			2		109
Marsh Wren									1*						1*nc							2
Golden-crowned Kinglet		7					17	5	22	54	48	140	119	24hc	141	85	16	10	47	8		1005
Ruby-crowned Kinglet		1		1			3						13	[cw]	33	45		3			1	113
Eastern Bluebird	3	9		44	13	cw	17	5	52	19	116	67	120	6	203 HC	182	16	10	147	39	15	1160
Hermit Thrush		7							2		2		93 HC		83 hc	30	1		13	3		271
American Robin	1	22				1	11		17	45	888	162	786	13	1219	4500 HC	15	39	654	221 hc	140	12282
Gray Catbird																2						4
Northern Mockingbird		3		4		4	18	2	12	8	10	21	29	3	14	17	4	26	14	2	7	218
Brown Thrasher					1		1			3		1	10	2 hc	8	5	1		4			39
European Starling	55	490	470	676	889	535	1321	260	825	12527	1253	7774	2861	3129 hc	850	2500	5109	12780	52620	1718	511	188276
American Pipit																62* HC						63
Cedar Waxwing		93	27	69		24	3		16	166 hc	19	23	40	153 hc	16	110			804	71	126	3923
Orange-crowned Warbler										1*												4
Yellow-rumped Warbler							4		2	9 hc	87	18	203	10 hc	195	168	5		111	2		1062
Pine Warbler										1*		5*										6
Palm Warbler									1*													3
Common Yellowthroat									1*													5
Eastern Towhee							4	1	4	10	5	7	17		29	26	2		47	1		159

	Central												*South*									
Species	RUSH	MERE	WMER	QUIN	LINC	NEWT	BIRD	KASK	BALK	RDLK	JACK	CROR	CYCR	CALK	UNION	HSLK	MRLK	COLL	WRBV	PEMR	ELSA	TOTALS
American Tree Sparrow	19	1557	382	348	24	116	98		132	80	27	24	104	557	45	33	11	86	4	384	5	22858
Chipping Sparrow																1*				1*		2
Field Sparrow		1	1*	4		4	49		41	16	13	4	23	6	41	37	24	9	69	4		392*
Vesper Sparrow																						1
Savannah Sparrow		1				18	1		5	2	5			4	20	16		1		2		83
Le Conte's Sparrow													2	2								4
Fox Sparrow		26		1			1		9	7 hc	13		32	2	13	31		2	4	10		209
Song Sparrow	4	228	37	26	12	21	58	1	45	150	47	24	281	582 hc	232	235	18	51	85	222	9	4161
Lincoln's Sparrow											· ,		1*									3
Swamp Sparrow		34	12	8		2	7		11	51	60	2	159	465 hc	104	134	2	6	1	17		1658
White-throated Sparrow		64	32	19		2	63	20	171	195	303	153	564	329 hc	830	1500 HC	43	74	156	448 hc	30	5987
Harris's Sparrow													1								[11 m? dd	3*
White-crowned Sparrow	3	49		16	51	cw	32	1	37	35	8	8	57	193 hc	23	62	1	3	11	49	4	862
Dark-eyed Junco	32	590	322	484	306	186	346	119	304	513	408	506	347	547	560	621	50	126	658	450	75	30909
Lapland Longspur		625				300	50			16	362	4			2	160						2927
Northern Cardinal	67	271	136	176	122	106	275	64	221	403	248	272	476	392	374	471	29	127	202	162	151	11778
Indigo Bunting										1*				2*		1*						4
Red-winged Blackbird		111	261	70		21	28		398	143393	31541	5076	2051	101	7200	1000	5595	10909	18938	267		249175
Eastern Meadowlark		2		42	4	224	60		24	103	34	2	195	26	92	133	80		115	24		1204
Western Meadowlark															1							1
meadowlark sp.							1		62													66
Rusty Blackbird							163			361			54		36	2	3	13	505	2		1363
Brewer's Blackbird																	1*					1
blackbird sp.							3	595	1720			118350	2200					1150000	39320	1		1361395
Common Grackle	11	2		1	7	6	39	3	672	181730	1242	34313	3700	177	2400	255	6407	26376	58871	9	50	328784
Brown-headed Cowbird		2	1	4	4	2	5		5	4004	171	15	153	6	340	147	257	962	246		16	10053
Purple Finch	19	33	14	2	5	1				3	17	7	29	1	8	2	3		44	21		475
House Finch	25	13	7	99	38	9	72	1	29	13	71	9	37	85	88	630 hc	40	34	12	8	17	6984
Pine Siskin				13			3			57 hc	13	15	17	69 hc	14	84 hc					5	1810
American Goldfinch	189	202	88	273	176	473	140	15	256	58	94	99	285	577	424	476	56	110	74	577	174	12129
House Sparrow	215	262	634	546	503	248	717	41	180	44	329	39	72	418	78	248	25	242	72	339	261	36846
Eurasian Tree Sparrow	63	823	58	7														47		469 hc	7	2047
Total species	36	75	69	67 hc	43	78	80	36	85	104	84	88	96	95	92	92	82	80	66	86	55	
Total individuals	1213	10908	16892	6285	4816	14171	6088	1345	11161	374517	42319	189136	60883	50113	48666	47080	20643	1206189	175578	22049	2633	

Grassland Bird Research at Prairie Ridge State Natural Area

by Jeff Walk and Eric Kershner

In Illinois, birders often have a difficult time finding grassland species during the breeding season. Small grasslands, those less than 40 acres, rarely attract the endangered species such as Upland Sandpipers, Northern Harriers, and Henslow's Sparrows to breed. Indeed, the more common species such as Eastern Meadowlark may even be difficult to find in these smaller grasslands.

Grassland habitat is at a premium in Illinois. Within the past 40 years, more than half of Illinois' pastures and hayfields — surrogate homes for many grassland species — have been lost to row crop expansion, urban development, and other land use changes.

Along with these changes have come disturbing numbers from Breeding Bird Surveys. The state is losing 3 percent to 7 percent of its grassland bird populations each year, or in less benign terms, we have lost 65 percent to 90 percent of our Dickcissels, Bobolinks, Grasshopper Sparrows, and Eastern Meadowlarks in the past 30 years. This is a major avian conservation problem for the Midwest.

We have been conducting breeding season investigations at the Prairie Ridge State Natural Area in Jasper County (formerly the Prairie-Chicken Sanctuary).

Our work tries to arm grassland managers and restorationists with reliable information for conserving these resources. Should grassland vegetation be short or tall, sparse or dense? How do prescribed burning, grazing, and mowing affect these birds? Does grassland size affect the species present? Do grassland size and surrounding land uses influence predation of bird nests? How often will birds renest each season? How well do young birds survive after leaving the nest? Can populations stabilize when habitat destruction stops or new habitat is created?

The site has many features, which make it interesting to study. Prairie Ridge consists of severalsmall grasslands surrounded by intensive agriculture. These grasslands cover a wide range of sizes (17 acres to 300 acres) and distances from one another (up to 5 miles).

Prairie Ridge also contains a wide variety of habitat types including introduced grasses such as brome, redtop, and bluegrass; restored native grasses; and areas that are either burned, mowed, grazed, or left undisturbed.

Prairie Ridge consists of about 1,600 acres. Although land mangers think a site with at least 4,000 acres is required to sustain viable populations of rare grassland birds, Prairie Ridge attracts copious breeding grassland birds, some of them rare or endangered. The reserve has hosted approximately 50 Northern Harrier and 20 Short-eared Owl nests in the 1990s as well as 40 pairs of Henslow's Sparrows, 5 pairs of Upland Sandpipers, and hundreds of pairs of Dickcissels, Grasshopper Sparrows, Eastern Meadowlarks, and Field Sparrows. Greater Prairie-Chickens have been maintained on this small amount of habitat for 30 years, and after a genetic management program to al-

leviate inbreeding, have recovered to a 20-year population high. Hopefully, this success can be duplicated elsewhere.

We spend much of our time conducting surveys of singing males as well as locating and monitoring grassland bird nests. We characterize each nest site by gathering data on nest concealment and height, vegetation type, structure, and location relative to potential predator travel corridors such as trails, streams, fences, and field edges. We also record management work done at the site.

We trap Eastern Meadowlarks and Dickcissels in mist nets, band them, and radio-tag them to allow us to track them throughout the breeding season and document their response to nest successes or failures. We also radio-tag juvenile Eastern Meadowlarks to monitor their movement and survival after fledging.

We also have created small satellite grasslands nearby, and monitor nesting within them. As a management practice, these satellites would be periodically destroyed and reproduced elsewhere; perhaps birds colonize these areas faster than predators, thereby enjoying higher breeding success.

Since 1996, we have conducted thousands of surveys and monitored about 1,400 nests at Prairie Ridge. Some portions of our research are complete; others are still in progress. The following are some of our preliminary conclusions:

* Grassland reserves need to be fairly large for at least two reasons: first, to attract "area-sensitive" species, and second, to contain a variety of vegetation types necessary to attract different species. Grasslands of 160 acres or larger attract significantly more species, particularly rarer species including Upland Sandpipers, Henslow's Sparrows, and Northern Harriers, than smaller grasslands.

* Locating scattered grasslands within 1 km (0.6 mile) of each other helps maintain more species.

* Complicating matters, endangered species such as Upland Sandpipers, Short-eared Owls, Greater Prairie-Chickens, and Northern Harriers appear restricted to areas farther than 400 m (0.25 mile) from wooded areas, whereas grassland-dependent species such as Loggerhead Shrikes and Bell's Vireos require shrub patches or small trees for nesting. Size permitting, a mosaic of vegetation types should be provided within grasslands to attract different species.

* Dickcissels, Northern Harriers, Sedge Wrens, and Henslow's Sparrows prefer taller, denser grass.

* Eastern Meadowlarks, Grasshopper Sparrows, Upland Sandpipers, and Short-eared Owls prefer shorter vegetation. Low-intensity grazing has been found to be useful for creating diverse vegetation structure.

* Dickcissels, Field Sparrows, Henslow's Sparrows, and Eastern Meadowlarks were more abundant in grazed prairie grass than all other vegetation types. Grasshopper Sparrows, the other species surveyed, were somewhat more common in grazed introduced grasses.

* Nest success is variable among years, but seems to typically be high enough to maintain or enlarge local populations. Individual birds persistently renest, sometimes averaging 3 to 4 times per season!

* Nest predation is greater on smaller grasslands, reinforcing the need for larger areas.

* The satellite grasslands show lower predation rates than older grasslands of similar sizes. However, some species needing serious management attention (e.g., Henslow's Sparrows) are not attracted to such young vegetation nor small areas.

Our research has already begun to affect specific grassland wildlife management challenges at Prairie Ridge. As our work concludes over the next two years, hopefully these results will be helpful tools for conserving grassland birds throughout the Midwest.

Acknowledgments.

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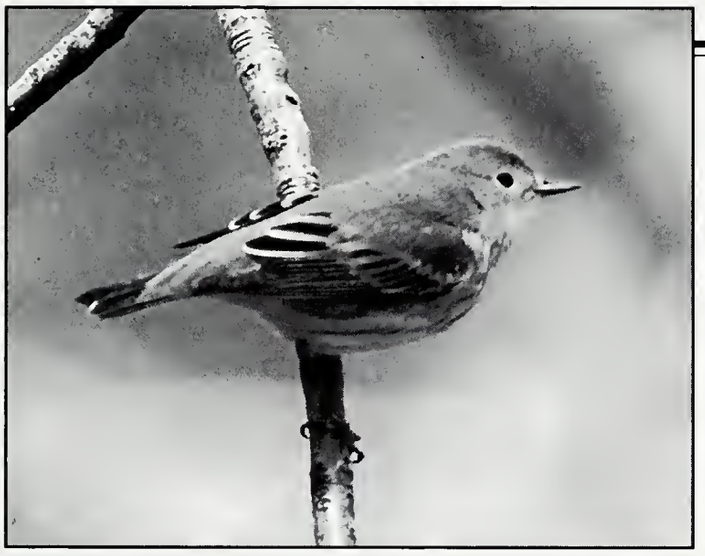
Southern Illinois Birding Hotspots
Part 1: Pomona

by Keith A. McMullen



Southern Illinois birders consider Pomona one of the best places to see migrating and breeding warblers including Prothonotary, Cerulean, and Yellow Warblers. Dennis Oehmke took this photo of a male Yellow Warbler in central Illinois on 14 May 1997.

Illinois has many great birders and no wonder! Our great state has countless excellent birding locations. Most Illinois birders are familiar with the hotspots around the larger cities and metropolitan areas of northern and central Illinois. The likes of Chicago, Champaign, Rockford, Peoria, Springfield, Decatur, Bloomington, and Charleston are all birded fairly well, and many of you live in those areas.

However, southern Illinois has numerous exciting locales that seemingly only a handful of Illinois birders even know about. This article is the first in a series to highlight some of southern Illinois' s best known "secret" birding locations. Many of you IOS members may have visited one or more of these spots in 1996 or 1997 during IOS meetings and field trips. Please read on and enjoy! Hopefully, you can visualize what I see and feel as I walk the paths of the excellent birding spots southern Illinois has to offer.

Let's begin with my personal favorite! I call it Pomona. Others call it Cave Creek.

The reason I refer to it as Pomona is that you reach the location by taking Illinois Route 127 south of Murphysboro to the Pomona exit. Turn west (right) and drive through the small town of Pomona. Yes, it even has a post office and the general store on the corner has sodas and snacks for that necessary energy for a full day of birding. Not everyone takes grocery sacks full of junk food like I do!

At the intersection in Pomona, turn right and you'll be heading north on a gravel road. Travel approximately 1.5 miles until you see a pine forest on your right and a dense, deciduous forest to your left. Shortly you'll see a bridge. This bridge crosses Cave Creek. You can park just before the bridge on the right or cross the bridge and pull over to the side of the road on the right just past a gravel road heading due east.

If my car is already parked on the right prior to the bridge (can't miss my car, license plates read: WARBLR1), then proceed to the latter area for decent parking. The gravel road that heads east is the old railroad bed and is great for walking. Many turkey hunters use this road in spring. Likely you'll already see other birders, hunters, or nature enthusiasts parked there so rest assured you are in the right spot.

Now the fun begins! My favorite time to visit Pomona is, of course, spring. In early spring, neotropical migrants are returning from their winter escapes. Many of these will venture farther north but several species do breed around Pomona; some are difficult to find breeding anywhere else in the state outside of southern Illinois.

You've got two choices of main trails to investigate. You can always walk along the road south back toward Pomona or north, up a hill, and around the curves in the road. However, similar species and habitats result, therefore, I suggest the trail to the east prior to the bridge or the old railroad bed that also travels east.

At the trailhead before the bridge, you'll notice many boxelder and other small maples and shrubs that are less than 25 feet tall. This area sometimes can be flooded with migrants if conditions are right. Nashville Warbler, Magnolia Warbler, Yellow-breasted Chat, Gray Catbird, White-eyed Vireo, and many sparrow species feed in these smaller trees and shrubs.

After crossing a small ditch, to your right, you'll notice a hillside dominated by pines. Here is where the

Broad-winged and Cooper's Hawks have nested in recent years. Often they sit quietly and do not flush until after you've gone past their nest. If you're lucky, you may even spot the nest. But please be careful not to disturb these birds.

The trail meanders through a bottomland hardwood forest with the pine hillside to your right. Depending on what time of spring you visit, April or May, this area should have tremendous numbers of Northern Parula, Yellow-throated, Cerulean, Blue-winged, and Pine Warblers, plus Louisiana Waterthrush and American Redstart. Red-breasted Nuthatches are also usually flitting in the pines.

In early spring, this area attracts Hermit Thrushes, Yellow-bellied Sapsuckers, and both Golden-crowned and Ruby-crowned Kinglets. If you don't get a great view of a Pileated Woodpecker on this trail then I'd have to believe you were blindfolded! Several pairs of them breed here and are often too busy to notice you; therefore, viewing opportunities can be superb.

In spring and summer, you can also often find Red-eyed, Yellow-throated, and White-eyed Vireos here.

Eventually the trail gets really wet and you'll consider it time to return to your car. Good choice! Moving farther to the east usually requires knee boots, is tough walking, and has been known to contain more than one cottonmouth! Yes, snakes are common at Pomona, but if you pay attention to where you step, you should be safe.

I usually retrace my steps back to my car and then venture east down the old railroad bed, where in late April and May, I typically find White-eyed Vireo, Blue-gray Gnatcatcher, American Redstart, Northern Parula Warbler, Yellow-throated Warbler, and Yellow-breasted Chat. These species breed here, so you'll likely find them in June and July, too. Walk about one mile to a forest trail that is at your right and goes uphill a short distance and into an area of pines. Take this trail if you want, or continue heading east down the old railroad bed.

The trail that goes south into the pine forest leads to a pond. Beware, as the pond is home to many cottonmouths. This is where I've had my closest calls with the moccasins. It's good to have your heart beating extra fast sometimes. And it's good when the snake goes the other way, too.

This pond can be very rewarding for birds. Black and Turkey Vultures sometimes roost in the trees near the pond. Red-shouldered Hawks should easily be found, and likely you have already discovered several before reaching the pond. Wood Duck, Blue-winged Teal, and Mallard can be found along with Great Blue Heron and Green Heron. Swallows, especially Northern Rough-winged, Purple Martin, and Tree, are commonly seen catching insects above the pond's surface. Yellow-throated and Pine Warblers are usually found in the pines along the way. Stay alert for breeding Summer and Scarlet Tanager, too. Often, both species are in the same tree.

One of my favorite warbler species is the Prothonotary. At Pomona, and especially just southwest of the pond a few feet, you can usually get an excellent view of this golden-headed bird.

Near the pond is where the last Swainson's Warblers were detected in the early 1990s. I haven't seen or heard them at Pomona since the late 1980s. It's unfortunate, but habitat destruction, both in the tropical wintering areas as well as the breeding grounds in North America, has significantly depleted this species' numbers.

After enjoying the quiet retreat of the pond area, it's likely time to return to your car. By now, you've probably added another 10 species to your day list and that Poptart, white-powdered donut, or granola mix is sounding really good! Or maybe, a close encounter with a cottonmouth to go with your 10 species and growling stomach have suggested it's time to move on.

You'll find many other interesting species at Pomona. Over the last few years, Mississippi Kites have been regular, even attempting to nest in recent years.

In spring and summer, Blue Grosbeaks are almost right off of Illinois Route 127 as you exit for Pomona. Usually you will at least hear them. Other specialties include Kentucky Warbler, Carolina Wren, Fish Crow, Carolina Chickadee, and Acadian Flycatcher.

All in all, Pomona offers fairly easy walking, decent access, serenity from the urban life, spring wildflowers galore, and birding that's hard to beat.

Don't forget your bug spray. Ticks and mosquitoes thrive. And yes, the snakes. However, don't let them scare you away. Actually, most snakes encountered here are non-poisonous. Don't forget the turkey hunters. In season, they're out there. They have rights, too, so be courteous.

If you want more information on Pomona, or southern Illinois birding, in general, please check W. Douglas Robinson's book, *Southern Illinois Birds* published by Southern Illinois University Press (1997). It includes detailed migration chronology and historical records for all species recorded in southern Illinois. The bonus is a location guide that Doug included, which should be valuable to birders for years to come. Tune in to a future issue for more southern Illinois birding. Until then, good birding!

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SEASONAL HIGHLIGHTS - Winter Season 1997/98

Breeding Plumage Franklin's Gull found in January

On 2 January 1998, I went to Wilmette's Gillson Park with Josh Engel to look for unusual gulls. We brought plenty of bread to attract the birds, and we hoped for some close views of white-winged gull species that can be found here in winter. The recently completed Christmas Bird Counts had yielded some unusually late stragglers in northern Illinois, and the weather remained unseasonably warm.

Breeding plumage Franklin's Gull at Wilmette's Gillson Park, Cook Co. 2 Jan. 1998. This is northern Illinois's first January record for this species. Photo by Eric Walters.

Soon after arrival, I scanned the gull flock on the ice mound on the beach south of the harbor mouth entrance. A small, dark-hooded and dark-mantled gull resting among the Ring-billed and Herring Gulls startled me. I yelled to Josh that I thought I had a Laughing Gull (*Larus atricilla*), reasoning that the other dark-hooded, dark-mantled gull, the Franklin's, winters in South America. But the more we looked, the more its features fit a Franklin's Gull (*L. pipixcan*). Not satisfied with the look, we threw bread into the harbor channel. Immediately, the gull flew towards us affording us views as close as 15 feet away.

The bird had a dark hood; thick, white eye crescents; a reddish unmarked bill; a dark gray mantle; black legs; and a small amount of black in the wings separating white tips from the white crescent-shaped inner primaries. There was no doubt about it; we had discovered a Franklin's Gull in January.

This is the second northern Illinois record for January and only the fourth in January for the state. A Franklin's Gull was reported in Rock Island on the Mississippi River from 11-12 January 1992 (Danley 1992: 111). The other two January records are from central Illinois; one adult was found on the Mississippi River in Hamilton 16-17 January 1987 and another adult stayed as late as 6 January 1976 at Lake Springfield (Bohlen 1989).

A Franklin's Gull in January is rare enough. But one in breeding plumage is even rarer. This species goes through a complete molt starting sometime between November and April on its South American wintering grounds. The Franklin's Gull wears the adult summer plumage from February to September (Grant 1986).

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Yellow-breasted Chat Winters in Northern Illinois

On 21 December 1998, I ran into Craig Thayer who was helping me with the Christmas Bird Count at Little Red Schoolhouse Nature Center in the Palos area, Cook County. He told me of his morning highlight of over a dozen Tufted Titmice, which we thought was a spectacular number for northeast Illinois. He also mentioned that he met Karen Hart, who claimed to have seen a Yellow-breasted Chat (*Icteria virens*) at the beehives!

Craig made two forays after this large warbler but had no luck. News spread on IBET, the computer E-mail list for Illinois birders, that this chat was seen eating dead bees at the nature center. Later in the week, I went out to meet Joe Milosevich who had his camera set to photograph this unusual winter occurrence. Joe pointed out the chat, which was facing away from me, sitting still in the brambles. No wonder others had missed this bird in the previous few days. The area around the beehives was surrounded by thickets of multiflora rose and if the bird was not active, it was unlikely to be seen.

On 31 December 1998, everything was quite different. The temperature was warmer, the sun was shining, and bees were flying. The chat was actively feeding, mostly on the many dead bees on the snow, but sometimes as bees exited the hives. At one point, the chat landed 25 feet away in completely unobstructed snow-covered grass. My previous experience has been ones of brief fleeting glances, usually through leaves and bushes. Against the snow, the chat stuck out like a shining lemon.

Bohlen (1989) mentions three records of wintering chats in Illinois, none in the northern part of the state. The chat stayed through 21 January 1998, and was seen sporadically by naturalists at the nature center.

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Bohlen, H. D. 1989. The birds of Illinois. Indiana University Press, Bloomington, IN.

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Field Notes

Surf Scoter drawing by David Athans.

The 1997/98 Winter Season

By Robert Danley

The 1997/98 winter season was outstanding for late-departing fall migrants, and included a scattering of rarities. Even with the mild winter, typical cold weather species were present, though not in large numbers. Because of this, the period produced perhaps the widest range of species detected in Illinois for a winter season. Deserving special mention are Western Grebe, **Barrow's Goldeneye**, Osprey, breeding-plum-aged Franklin's Gull, **California Gull**, inland **Black-legged Kittiiwake**, **Eurasian Collared-Dove**, Sedge Wren, **Varied Thrush**, eight species of warblers, and good concentrations of winter finches.

Trends for most bird families were mixed. Waterbird highlights included four species of grebes; late pelicans, cormorants, and Great Egrets; again large spring stagings for "western" geese; many Canada Geese wintering north of their traditional southern Illinois areas; and all three scoter species. All the birds of prey were found in average and above numbers. Bald Eagles were found in usual numbers. Northern Harriers and Rough-legged Hawks were found in good concentrations given proper habitat. Accipiters had a very good season; observers spotted many near feeders, while a handful of lucky observers found Northern Goshawks. Various morphs were reported for Red-tailed Hawks. Kestrel and gamebird numbers were low. Observers recorded 11 species of gulls, though numbers of individuals were fewer than usual. Owls were unspectacular, except for the concentration of Short-eared Owls at Prairie Ridge State Natural Area. Sapsuckers were scarce. The Pileated Woodpecker continues to be increasingly present in the northern half of the state.

Observers also counted excellent numbers of Red-breasted Nuthatches early in the season. Several wrens lingered late. Scattered warbler rarities colored the state for several lucky birders. Sparrow diversity was excellent. Dark-eyed Juncos, Lapland Longspurs, and Snow Buntings put in normal appearances even without the usual snow cover. A good variety of winter finches was seen, though Evening Grosbeak bucked the trend; this was the second winter in a row with low numbers for this species.

The weather could be described with two phrases; El Nino and clouds. Fortunately our state escaped the devastating high winds and rainfall suffered by coastal states. Most of Illinois just suffered from prolonged cloudiness and balmy temperatures. Meteorologists said the past January (1998) was the cloudiest in Chicago history.

The last similar strong El Nino effect was in 1982/83. Interestingly, observers recorded a similar slate of species then, closely matching what was found this year, including many late warblers.

Winter was restricted to a period from 10 to 14 January 1998, bringing the coldest temperatures of the season: lows of 0-8 degrees F and highs near 20 degrees F. December finished 4 degrees above normal and received only 75% of normal precipitation. After a mid-January cold snap, temperatures rebounded to 6 or more degrees above normal with below normal amounts of rainfall.

A special thanks is extended to all contributors to this report, who are listed here in full and by initials following each observation: Cindy Alberico, Alan Anderson, Renee Baade (RBa), Margaret Baker (MBa), Steve Bailey, Mark Bennett (MBt), Dale Birkenholz (DBi), Richard Biss, Richard Bjorklund (RBj), David Bohlen, Aaron Boone (ABo), Ron Bradley (RBr), Todd Bugg (TBu), Scott L. Carpenter, Karin Cassel, Robert Chapel, Paul Clyne, Scott Cohrs, Will Corning, Robert Danley, Glyn Dawson, Myrna Deaton, Judy De Neal, Tim Dever, Tammy Devine (TDe), Josh Engel, Carolyn Fields (CFs), Karen Fisher (KFi), Robert Fisher (RFi), Darlene Fiske, Matt Fraker (MFr), Urs Geiser, Michelle Georgi (MGe), Brad Grover, Jim Hampson, Marianne Hahn (MHa), Scott Hickman, Cary Hillegonds (CHi), Frank Holmes, Larry Hood, Robert Hughes, Jim Hullihan (JHn), Barrie Hunt, David Johnson, Dan

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WINTER 97/98 FIELD NOTES

Red-throated Loon
LD: 7 Dec, Saganashkee Slough (Cook Co)(WS, RFi, KFi).

Common Loon
Wintered, CONWR (RD). LD: 14 Dec, Decatur (Macon Co)(MD); 6 Dec, Spfld (DB). EA: **13 Feb**, Wolf L (Cook Co)(DFS).

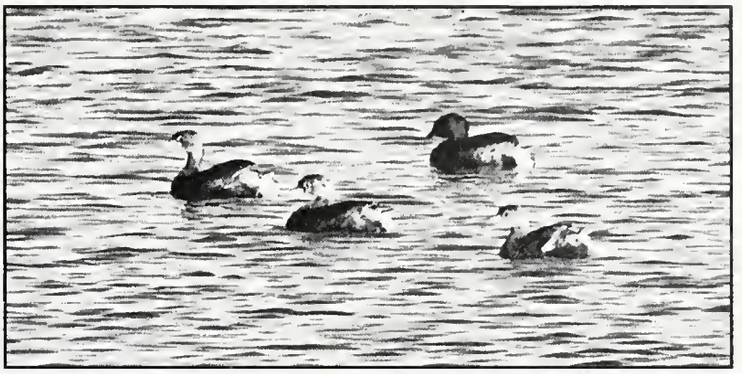
Pied-billed Grebe
MC: 86, Newton L (Jasper Co), 23 Dec (JW); 55, Spfld, 27 Jan (DB); 40, CONWR, 2 Feb (KM); 23, Will & Grundy Cos, 27 Dec (JM); 22, HL, 2 Dec (KM). LD: 15 Jan (2), Wolf L (Cook Co)(DFS); 27 Dec, Wauk (SH); 27 Dec, LCal (MBa).

Horned Grebe
MC: 17, Spfld, 2 Dec (1 wintered—DB); 12, CONWR, 23 Jan (RD); 4, Bloomington (McLean Co), 27 Dec (MFr); 3, HL, 2 Dec (KM); 2, Decatur (Macon Co), 20 Dec (MD).

Eared Grebe
MC: 2, Spfld, 16 Dec (1 wintered—DB).

Western Grebe
9 Jan, JP (SLC, *PC)—second latest departure for IL.

American White Pelican
MC: 55, LChau, 5 Dec (RBj); 2, Henderson Co, 26 Dec (AR). EA: 26 Feb, Madison Co (FH).



Pied-billed Grebes. Braidwood, Will Co. 27 Dec. 1997. Sixteen Pied-billed Grebes were tallied at the Morris-Wilmington Christmas Bird Count. Photo by Joe B. Milosevich.

As a printing aid, the following abbreviations have been used throughout this report:

CBC	=	Christmas Bird Count	m.ob.	=	many observers	CA	=	Conservation Area
EA	=	Earliest Arrival(s)	ad.	=	adult	FP	=	Forest Preserve
MC	=	Maximum Count(s)	subad.	=	subadult	L	=	Lake
LD	=	Latest Departure(s)	imm.	=	immature	L&D	=	Lock & Dam
*	=	documented record	wint.	=	winter (plumage)	R	=	River
ph.	=	photographed	Co(s)	=	County (Counties)	SP	=	State Park

Carl.L	= Carlyle Lake (Clinton, Fayette & Bond Cos)	LCNP	= La Salle County Nuclear Plant (La Salle Co)
CBG	= Chicago Botanic Garden (Glencoe, Cook Co)	M.Arb	= Morton Arboretum (Du Page Co)
CypCrk	= Cypress Creek National Wildlife Refuge (Pulaski Co)	MFWA	= Middle Fork Fish & Wildlife Area (Vermilion Co)
Chi	= Chicago's Lakefront Parks, excluding JP (Cook Co)		
Clin.L	= Clinton Lake (DeWitt Co)	MidewinPr	= Midewin Tallgrass Prairie (Will Co)
CNC	= Crabtree Nature Center, Barrington (Cook Co)	MM	= McKee Marsh (Du Page Co)
CONWR	= Crab Orchard National Wildlife Refuge (Williamson Co)	Montrose	= Chicago's Montrose Harbor area (Cook Co)
		Miss. R	= Mississippi River (various counties)
DeerG	= Deer Grove FP (Cook Co)	MsPal	= Mississippi Palisades SP (Carroll Co)
Evanston	= Evanston (Cook Co)	MVSP	= Moraine View SP (McLean Co)
Fermi	= Fermilab at Batavia (Du Page Co)	Palos	= Palos area forest preserves (Cook Co)
GLPSP	= Goose Lake Prairie SP & Heidecke L (Grundy Co)	PRSNA	= Prairie Ridge State Natural Area (Jasper Co)
GrantP	= Chicago's Grant Park (Cook Co)	Rend L	= Rend Lake (Franklin & Jefferson Cos)
HL	= Horseshoe Lake (Madison Co)	Rockford	= Rockford (Winnebago Co)
HLCA	= Horseshoe Lake CA (Alexander Co)	SRSF	= Sand Ridge State Forest (Mason Co)
IBSP	= Illinois Beach SP (Lake Co)	Spfld	= Springfield (Sangamon Co)
JP	= Chicago's Jackson Park (Cook Co)	UCCA	= Union County CA (Union Co)
Joliet	= Joliet (Will Co)	Urbana	= Urbana (Champaign Co)
LCal	= Lake Calumet & vicinity (Cook Co)	Wauk	= Waukegan (Lake Co)
LChau	= Lake Chatauqua National Wildlife Refuge (Mason Co)	Wilmette	= Wilmette (Cook Co)

Transparent directionals such as ea. = east(ern), ne. = northeast(ern), so. = south(ern), etc., are used where relevant. When information on counts greater than one, on sexes, and/or on ages of birds observed is available, it is generally included in parentheses after the date of the record. Headings for species requiring review by the Illinois Ornithological Records Committee (IORC), and species of extremely unusual occurrence in Illinois in winter, appear in **CAPITALIZED, UNDERLINED, AND BOLDFACED** fonts. Noteworthy dates of occurrence and remarkably high counts for the state as a whole or for particular regions of the state are **underlined and boldfaced**, and some further editorial remarks are **boldfaced**. Publication of some documented records has been withheld, pending IORC review. Waterfowl survey reports from Michelle Georgi (MGe) of the Illinois Natural History Survey are aerial estimates.

Double-crested Cormorant
MC: 200, Rend L, 8 Dec (KM). Others: 6 Dec, Wauk (JMd); 18 Dec, JP (PC); 27 Dec, Braidwood (Will Co)(CA); 3 Jan (2), LCNP (C&JMc); 5 Jan, Wolf L (Cook Co)(DFS); 7-19 Jan, Carl.L (KM); 9 & 10 Jan, Spfld (DB).

Great Blue Heron
MC: 106, Carl.L, 22 Dec (KM); 14, Will & Grundy Cos, 27 Dec (JM); 11, Spfld, 13 Dec (DB). Lingered at several sites even in no. counties well into Jan; wintered at Riverwoods (Lake Co)(EW).

Great Egret
LD: 28 Dec, Mel Price L&D (Madison Co)(FH); 12 Dec, Spfld (DB); 11 Dec, Decatur (Macon Co)(MD).

Black-crowned Night-Heron
MC: 35, HL, 19 Jan (wintered—KM). Other: 21 Feb (locally wintering?), Champaign Co (JW, WL).

Black Vulture
6, Jackson Co CBC, 22 Dec (RMo).

Snow Geese. Lake Sangchris, Sangamon Co. 22 Feb. 1998. Photo by Dennis Oehmke.

Turkey Vulture
LD: 13 Dec, Rend L (LSt).

Greater White-fronted Goose
MC: 635, Carl.L (Clinton Co), 22 Dec (KM); 600, Spfld, 5 Feb (DB); 194, Clin.L, 19 Dec (RC); 127, LCNP, 14 Feb (C&JMc). Others: 41, Winnebago Co, 15 Feb (BG); 35, Newton L (Jasper Co), 2 Jan (JW, DOn, SSp); 7, Glacial Park (McHenry Co), 24 Feb (RBa); 24 Nov-2 Jan, Wilmette/Evanston (JK, *MHa, EW et al.).

Snow Goose
MC: 120,500, so. Illinois conservation areas, 27 Jan (RMa); 10,000, Spfld, 4 Feb (DB); 525, Carl.L, 21 Feb (KM); 510, LChau, 12 Feb (RBj). LD: 20 Dec (2), Pecatonica (Winnebago Co)(DW).

Ross's Goose
Probable blue morph, Spfld, 26 Jan (DB). MC: 9, Spfld, 20 Feb (DB—could have found many more); 7+, UCCA, mid Jan (RD); 3, Carl.L, 31 Jan (MD). Many intermediate birds (hybrids) are being seen. Blue morph hybrid, Winnebago Co, 13-20 Dec (*BG).

Canada Goose
Low numbers for so. areas. MC: 235,000, so. Illinois conservation areas, 28 Jan (RMa); 8,000, Spfld, 21 Jan (DB); 6,000, Mahomet (Champaign Co), 18 Jan (RC); 4,000, LCNP, 14 Feb (C&JMc), 4,228, LChau, 18 Dec (RBj); 1,010, Wauk, 13 Jan (EW); 900, JP, 1 Jan (PC). Small race: 8, JP, 14 Dec (PC).

Mute Swan
MC: 119, Wolf L (Cook Co), 27 Jan (DFS); 47, Long Grove (Lake Co), 23 Jan (CFs); 5, Heyworth (McLean Co), 31 Dec-period (TBu, MFr); 5, Grayslake (McHenry Co), 16 Jan (DW); 4 wintered, Riverwoods (Lake Co)(EW); 2 wintered, near MM (EW); 2, Gages L (Lake Co), 24 Feb (SH).

Tundra Swan
MC: **180+**, Wauk, 31 Dec (RB, EW); 40 (33 ad., 7 imm.), L Chau (RBj); 12 (5 imm), Winthrop Harbor (Lake Co), 17 Jan (with 8 still present on 18 Jan)(EW, m.ob.); 11 (6 imm., 5 ad.), Spfld, date? (DB); 5, LCal, 11 Jan (JL); 4, LCNP, 1-21 Dec (C&JMc); 3, Illinois R (La Salle Co), 31 Jan-13 Feb (C&JMc); 2 imm., Rockford, 14-26 Dec (DW); 12 Feb, Carl.L (DK). A late migratory movement.

Wood Duck
7-14 Dec, McLean Co (TBu); 20 Dec (3), Joliet (JM); 21 Dec (3), Spfld (DB); 1 Jan (5), Du Page Co (RFi, KFi); 1 Jan (2), Illinois R (La Salle Co)(C&JMc); 1 Jan (2), Illini SP (La Salle Co)(DS); 2 Jan (3), GLPSP (DFS).

Gadwall
MC: 230, Braidwood (Will Co) & GLPSP, 27 Dec (JM); 210, Spfld, 28 Dec (DB); 122, HL, 19 Jan (KM); 58, Wilmington (Will Co), 27 Dec (CA); 31, LCal, 15 Jan (DFS). Counts of 1-9 birds from various no. sites through 2 Jan.

American Wigeon
MC: 170, Spfld, 13 Feb (DB); 80, Carl.L, 22 Dec (KM); 22, Wilmington (Will Co), 27 Dec (CA); 5, Joliet, 20 Dec (JM); 7, Zion (Lake Co), 31 Dec (4 wintered—EW); 1-4, MVSP, 1 Jan-1 Feb (MR); 2, Winnebago Co, 15 Feb (BG).

American Black Duck
MC: 406, Newton L (Jasper Co), 2 Jan (JW); 125, Braidwood (Will Co) & GLPSP, 27 Dec (JM); 30, LCNP, 1 Jan (C&JMc); 20, Spfld, 28 Dec (DB—wintered also); 18, MidewinPr, 29 Jan (DFS).

Mallard
MC: 66,500, LChau, 18 Dec (RBj); 30,000, LCNP, 14 Dec (C&JMc); 5,400, Newton L (Jasper Co), 2 Jan (JW); 2,000, Spfld, 16 Jan (DB); 500-700, Shabbona L SP (DeKalb Co), 1-24 Dec (DS).

Blue-winged Teal
19-20 Dec, **Joliet** (*JM); 20 Dec & 12 Feb (pair), **LChau**, (RBj—probably overwintered nearby).

Northern Shoveler
MC: 352, HL, 25 Jan (KM); 155, HLCA, 3 Jan (fide VK—record high for CBC); 87, LChau, 12 Dec (RBj); 20, CBG, 3 Jan (JMd); 16, Lake Co, 23 Jan (CFs); 16, LCal, 9 Jan (DFS); 14, Spfld, 19 Jan (DB). Others: 7 Dec (5), McLean Co (TBu, MFr); 14 Dec (2), LCNP (C&JMc); 20 Dec, L Renwick (Will Co); 13 Jan, Evanston (EW).

Northern Pintail
MC: 15,400, Miss. R valley (statewide), 16 Dec (MGe); 217, Carl.L, 22 Dec (KM); 60, Spfld, 5 Jan (DB); 40, CONWR, 10 Jan (RD); 7, LCNP, 14 Dec (C&JMc).

Green-winged Teal
MC: 98, Newton L (Jasper Co), 2 Jan (JW); 13, Spfld, 18 Dec (DB); 10, Hidden L FP (Du Page Co), 2 Jan (EW); 7, Joliet, 20 Dec (JM). LD: 14 Dec, JP (PC, SLC).

Canvasback
MC: 26,900, upper Miss. R valley, 11 Dec (MGe); 140, UCCA, 4 Jan (fide VK—CBC record high); 75, Spfld, 29 Jan (DB); 65, HL, 19 Jan (KM); 13, Braidwood (Will Co), 27 Dec (JM). Others: Jan-

7 Feb (2), MVSP (MR, TBu); 13 Dec (female), Rockford, (BG); 1 Jan (male), Illinois R (La Salle Co)(C&JMc); 13-31 Jan (male), Wauk (EW, JMd).

Redhead
Found in usual low numbers. MC: 1,500, upper Miss. R valley, 11 Dec (MGe). Others: 15 Dec (10), Spfld (DB); 25 Jan (3), HL (KM); 13 Jan (2), Wauk (EW); 2 Jan & 20 Jan (2), Wolf L (Cook Co)(DFS); Dec-10 Jan, GrantP (DFS, JL, JMd); 1 Jan (male), Illinois R (La Salle Co)(C&JMc); 27 Dec, GLPSP (JM).

Ring-necked Duck
MC: 2,050, lower Illinois R valley, 11 Dec (MGe); 375, HL, 25 Jan (KM); 128, L Renwick (Will Co), 20 Dec (JM); 13, Illinois R (Grundy Co), 31 Jan (DFS). Others: 6-7 Dec, MVSP (MR); 15 Dec (5), Spfld (DB); 31 Dec-1 Jan (male), Wauk (EW, RB); 1 Jan (2 females), Illinois R (La Salle Co)(C&JMc); 18 Jan (3), LCal (WM); female wintered, Evanston (EW, m.ob.).

Greater Scaup
MC: 740, Evanston, 27 Dec (EW); 480, JP, wintered (KC). Others: 22 Feb (10), Spfld (DB); 3 Feb (3), MVSP (MR); 11 Jan, Illinois R (La Salle Co)(C&JMc).

Lesser Scaup
MC: 800, Rend L, 7 Feb (LSt); 300, Spfld, 30 Jan (DB); 115, Carl.L, 19 Jan (KM); 78, LCal, 27 Dec (WM, CHi). Others: 10-28 wintered, MVSP (MR); 27 Dec (11), Braidwood (Will Co) & GLPSP (JM); 1 Jan (6), Illinois R (La Salle Co)(C&JMc); 13 Jan, Wauk (EW); 29-31 Jan, Rock Cut SP (Winnebago Co)(DW).

Harlequin Duck
1 Dec (male), Montrose (RH); 14 Dec (male), JP (GD); 31 Dec-20 Jan (female), Wauk (EW, SH, m.ob.).

Surf Scoter
MC: 8, Montrose, 15 Feb (RH); 4, Carl.L, 19 Jan (KM); 3, Montrose, 12 Dec (RH). Others: 6-7 Dec, MVSP (MR et al); 20 Dec, Decatur (Macon Co)(MD); 31 Dec, Wauk (RB).

White-winged Scoter
4 Dec, Spfld (DB); 1-14 Dec (imm.), LCNP (C&JMc); 27 Dec (2), Evanston (EW); 28 Dec (2), Montrose (RH, KM)—same as Evanston birds; 31 Dec, Win-throp Harbor (Lake Co)(EW).

Black Scoter
26 Dec (2), Montrose (RH); 31 Dec, Wauk (RB).

Oldsquaw
MC: 40, Evanston, 27 Dec (EW, JE). Others: 6 Dec (male), Wauk (AS, JMd); 6 Dec (female), IBSP (AS, JMd); 6-14 Dec, Decatur (Macon Co)(MD); 21-27 Dec, Bloomington (McLean Co)(DBi, m.ob.); 1 Jan, Danville (Vermilion Co)(RC); 22 Dec & 19 Jan, Carl.L (KM, DK); 22 Feb, Rend L (LSt)

Bufflehead
MC: 3,400, upper Miss. R valley, 16 Dec (MGe); 108, Newton L (Jasper Co), 2 Jan (JW, SSp, DOn); 50, Wauk, 17 Jan (DFS); 45, CONWR, 23 Jan (RD); 30, Winthrop Harbor (Lake Co), 27 Dec (KM); 19, Spfld, 18 Dec (DB—10 to 12 wintered); 17, JP, 25 Dec (PC); 13, GLPSP, 27 Dec (JM); 7, LCal, 27 Dec (WM); 2 females, Rockford, 13 Dec (BG)

Common Goldeneye
MC: 5,400, Nauvoo (Hancock Co), 1 Dec (MGe); 600, Spfld, 21 Jan (DB); 377, Rend L, 10 Jan (LSt); 370, Carl.L, 22 Dec (KM); 250, GLPSP, 27 Dec (JM); 250, LCal, 18 Jan (WM); 183, JP, 21 Feb (PC); 125, Evanston, 14 Dec (EW); 49, LChau, 29 Jan (RBj).

BARROW'S GOLDENEYE
21 Feb (ad. male), CBG (*BRt).

Hooded Merganser
MC: 126, Newton L (Jasper Co), 2 Jan (JW); 90, Spfld, 1 Dec (DB); 89, Will & Grundy Cos, 27 Dec (JM); 32, LChau, 29 Jan (RBj); 20, Wauk, 20 Jan (SH); 14, Carl.L, 22 Dec (KM); 5, Illinois R (La Salle Co), 1 Jan (C&JMc); 3, Rockford, 3 Jan (DW); 2, LCal, 27 Dec (WM).

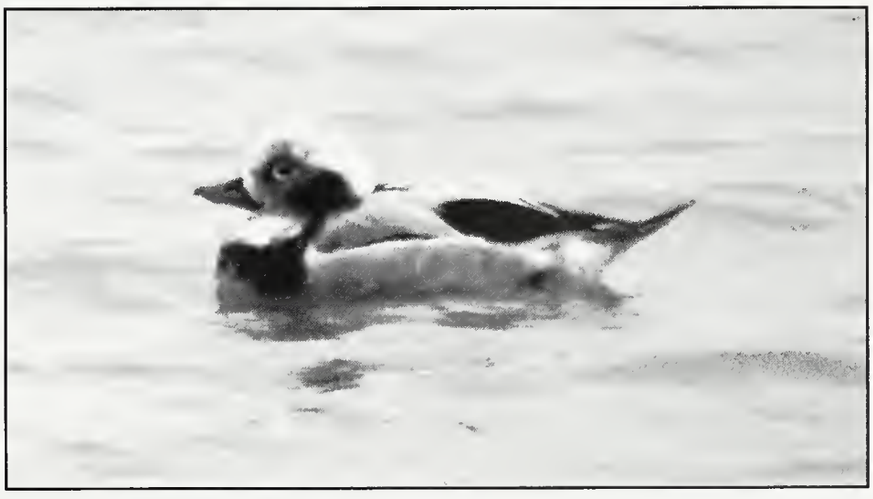
Common Merganser
MC: 2,000, GLPSP, 27 Dec (JM); 2,000, LCNP, 11 Jan (C&JMc); 660, Clear L (Mason Co), 12 Feb (RBj); 510, Palos, 15 Feb (CT); 456, HL, 25 Jan (KM); 435, Illinois R in Will & Grundy Cos (Joliet to Morris), 31 Jan (DFS); 300, Spfld, Jan (DB).

Red-breasted Merganser
MC: 200+, LCal, 10 Jan (WM); 70, JP, 25 Dec (PC); 50, Montrose, 28 Dec (KM); 28, Spfld, 1 Dec (DB); 13, Wilmette , 27 Dec (EW, JE); 8, GLPSP, 27 Dec (JM); 7, HL, 17 Jan (KM).

Ruddy Duck
MC: 238, LChau, 26 Feb (RBj); 215, Newton L (Jasper Co), 2 Jan (JW); 215, Madison Co, 20 Dec (FH); 62, GLPSP, 27 Dec (JM); 53, CONWR, 17 Jan (RD); 35, Spfld, 18 Dec (DB). Others: 13 Dec (2), Rockford (BG); 1 Jan (pair), JP (female overwintered—PC); 1 Jan, LCNP (C&JMc); 12 Jan (female), Wilmette (EW); 31 Jan, Wauk (JMd).

Osprey
EA: **23 Feb**, Starved Rock SP (La Salle Co)(JH).

Bald Eagle
MC: 380 (2 out of 3 were adults), Savanna Army Depot (Jo Daviess Co), 21 Feb (AA et al); 63, (36 ad., 27 imm.), UCCA & HL & Miss. R levee, 10 Jan (RMo et al); 52 (28 ad, 24 imm.), LChau, 5 Feb (RBj); 14, (11 ad., 3 imm.), Illinois R (Schuyler & Fulton Cos), 15 Feb (LH); 9, I & M Canal (La Salle Co), 28 Dec (DS); 5, Madison Co, 5 Feb (KM). Others: 3 Jan, Palos (CA); 9 Jan, Clin.L (MD); 10 Jan, LCal (UG); 11 Jan, McLean Co (MR); 8 & 26 Jan (3), Spfld (DB); 31 Jan, GLPSP (AS); 3 & 28 Feb (2), Starved Rock SP (C&JMc).



Male Oldsquaw. Wilmette's Gillson Park, Cook Co. 26 Dec. 1997. Photo by Eric Walters.

Northern Harrier
MC: 37, PRSNA, 22 Feb (JW); 26, sw. Franklin Co, 20 Dec (LSt); 6, Carl.L, 22 Dec (KM); 5, Ransom (La Salle Co), 15 Feb (DS); 3, La Salle Co, 1 Jan (DB); 3, Cook Co, 3 Jan (CA); 2, LCal, 5 Dec (JL); 2, Grundy Co, 27 Dec (JM); pair, 10 Jan, Spfld (DB); 2, LChau, 29 Jan (RBj); 2, Illinois R (Will Co), 31 Jan (DFS); 2, wintered, McLean Co (TBu, MFr). Others: 11 Dec (male), McDonough Co (LH); 20 Dec, Madison Co (FH); 26 Dec (male), Fulton Co (LH); 13 Jan (male), Winthrop Harbor (Lake Co)(EW).

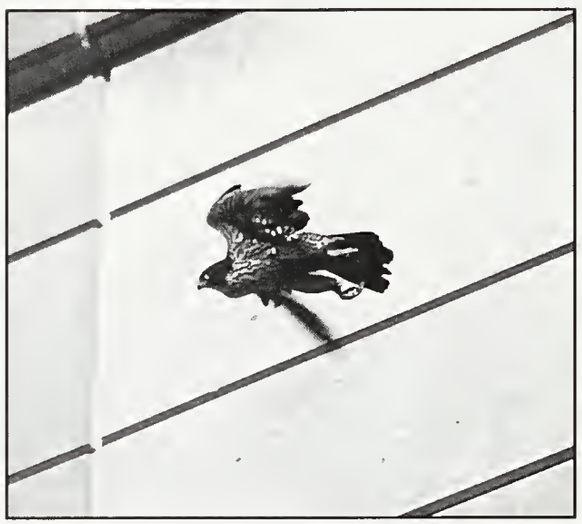
Sharp-shinned Hawk
Five sightings in Jan, Spfld (DB); 3 sightings in period, Vermilion Co (JOS). Others: 7 Dec, McHenry Co (RBa); 9 Dec & 24 Jan, Palatine (Cook Co)(CFs); 18 Dec, DeerG (CFs); 20 Dec, Will Co (JM); 20 Dec (2), Rend L (KM); 25 Dec (imm.), Joliet (CA); 31 Dec, Heyworth (McLean Co)(TBu); 1 Jan, Du Page Co (RFi, KFi); 1 Jan, Joliet (CA); 9 Jan, Eggers Woods (Cook Co)(DFS); 19 Jan, Carl.L (KM); 21 Feb, LChau (RBj); 21 Feb, Jo Daviess Co (DFS).

Cooper's Hawk
Seven sightings in period, so. Cook Co backyard (CT); 6 sightings, Du Page Co (RFi, KFi); 4 sightings, Vermilion Co farm (JOS). MC: 3, Spfld, 17 Jan (DB). Others: 4 Dec-27 Feb, (imm.), Palatine (Cook Co)(CFs); 20 Dec, Rend L (KM); 21 Dec, Greene Valley FP (Du Page Co)(AW); 27 Dec, Braidwood (Will Co)(JM); 1 Jan, Sand Ridge Nature Center (Cook Co)(WM); 5 Jan, St Clair Co (KM); 13 Jan & 16 Feb, MidewinPr (DFS); 24 Jan, Elgin (Kane Co)(JMd); 20 & 23 Feb, LCal area (DFS); 21 Feb, Ryerson CA (Lake Co)(EW); pair wintered, M.Arb (EW); 2 (ad., imm.) wintered, JP (PC).

Northern Goshawk
13 Dec & 19 Dec (ad.), Clin.L (MD, RC); 28 Jan-14 Feb (imm.), MVSP (MR); 22 Feb (ad.), Homer L (Champaign Co)(RC).

Red-shouldered Hawk
MC: 5, Jackson Co, 2 Feb (KM). Others: 12 Dec (ad.), Cook Co (CFs); 27 Dec, La Salle Co (C&JMc); 3 Jan (ad.), Allerton Park (Piatt Co)(MD); 22 &26 Jan (imm.), Spfld (DB); 25 Jan (ad.), CNC (AS); 21 Feb (ad.), IBSP (AS); 22 Feb, Urbana (RC); wintered, Northbrook (Cook Co)(MMr).

Red-tailed Hawk
MC: 34, Sangamon Co, 31 Jan (DB); 28, LCal, 31 Jan (JL); 27 (18 at MidewinPr), we. Will Co, 16 Feb (DFS); 21, Rend L, 20 Dec (KM); 15, La Salle Co, 21 Dec (DS); 12, Madison Co, 20 Dec (FH); 7, LCNP, 22 Feb (C&JMc). **Krider's:** 4 sightings, 5 Dec-21 Feb, Sangamon Co (DB). **Rufous morph**: 21 Dec, Bolingbrook (Will Co)(AW); 21 Feb, LCal (JL). **Harlan's**: 15 Dec, Vermilion Co (JOS); Jan, Ogle Co (DW); 28 Feb, Pulaski Co (KM); 20 Jan & 21 Feb, Spfld (DB); wintered, UCCA (RD).



Peregrine Falcon. First time record for the Evanston North-Shore CBC. 27 December 1997. Northwestern University. Photo by Eric Walters.

Rough-legged Hawk
MC: 3 light morph, Sangamon Co, 10 Jan (DB); 3, New Philadelphia (Pike Co), 26 Dec (LH); 3, Vermilion Co, 1 Dec (JOS); 2, Joslin (Henry Co), 26 Dec (LH); 2, IBSP, 13 Jan (EW); 2, Clin.L, 17 Jan (RC); 2 light morph, LCNP, 22 Feb (C&JMc). Others: wintered, PRSNA (JW, m.ob.); 1 Dec (dark morph), M.Arb (DFS); 7 Dec (dark morph), Coles Co (JW); 11 Dec, Winnebago Co (DW); 13 Jan (dark morph), MidewinPr (DFS); 15-31 Jan, LCal (JL); 17 & 20 Jan (dark morph), IBSP (AS); 24 Jan (light morph), Logan Co (MR); 24 Jan, Putnam Co (DS); 29 Jan (light morph), MidewinPr (DFS); 5 Feb, LChau (RBj); 14 Feb, McLean Co (MR).

Golden Eagle
MC: 3, UCCA, 1 & 27 Jan (RD). Others: 28 Feb (ad.), Spfld (DB).

American Kestrel
MC: 17, Sangamon Co, 7 Dec (DB); 13, Madison Co, 20 Dec (FH); 12, Rend L, 20 Dec (KM); 11, Palos, 17 Dec (WS); 11, Will & Grundy Cos, 2 Jan (DFS); 7, Homer (Vermilion Co), 1 Dec (JOS).

Merlin
11 Dec, Bloomington (McLean Co)(MFr); 1 Jan, M.Arb (RFi, KFi); 10 Jan, Humboldt (Coles Co)(JW); 22 Feb, LCal (JL).

Peregrine Falcon
6 Dec, Wauk (JMd); 23 Dec, Spfld (BW); 27 Dec, Evanston (JE, EW—1st for the CBC); 20-31 Jan (2), Montrose (m.ob.); 31 Jan & 27 Feb (2), LCal (JL); pair, JP, wintered (PC); pair, GrantP, wintered (DFS).

PRAIRIE FALCON
One individual: 19 Dec, Clin.L (GL, *RC); 17 Jan, DeLand (DeWitt Co)(*RC).

Gray Partridge
5, La Salle Co, 27 Jan (JH).

Ring-necked Pheasant
MC: 10, Spfld, 17 Feb (DB); numbers way down at McLean Co (MR); doing well at LCal (JL).

Greater Prairie-Chicken
120+ wintered, PRSNA (JW).

Wild Turkey
MC: 82, Seneca (La Salle Co), 1 Jan (C&JMc); 26, MsPal, 15 Jan (EW, ph.); 16, Spfld, 10 Jan (DB).

Northern Bobwhite
MC: 29, Spfld, 31 Jan (DB); 17, Trilla (Coles Co), 14 Dec (JW); 15, Macomb (McDonough Co), 12 Dec (LH); 10, HL, 17 Jan (KM).

American Coot
MC: 400, HL, 17 Jan (KM); 360, Wolf L (Cook Co), 9 Jan (DFS); 172, LChau, 5 Dec (RBj); 41, JP, 1 Jan (PC); 27, Spfld, 16 Jan (DB); 18, LCNP, 17 Dec (C&JMc); 14, Heyworth (McLean Co), 18 Jan (MR). Others: 24 Jan (2), Powerton L (Tazewell Co)(MR); 18 Jan (2), LCal (WM); 13 Jan (2), Evanston (EW); 17 Jan, Rockford (BG).

Sandhill Crane
LD: **31 Dec**, southbound at Wauk & JP (RB, UG);

Killdeer. Lake Sangchris, Sangamon Co. 22 Feb. 1998. Photo by Dennis Oehmke.

20 Dec (5), Palos (WS); 18 Dec (7), Woodstock (McHenry Co)(DF). EA: 17 Feb (30), Kankakee Co (TBu); 19 Feb (7), Rockton (Winnebago Co)(DW); 22 Feb (75), CNC (JMd); 24 Feb (4), Du Page Co (RFi, KFi); 25 Feb, Lake Co (JSw); 25 Feb (15), McHenry Co (BG); 27 Feb (16), Hyde Park, Chi (WC); 28 Feb (2), IBSP (AS).

Killdeer
MC: **54**, HLCA, 3 Jan (fide VK—record high for this CBC); 37, Carl.L, 22 Dec (KM); 27, LChau, 27 Dec (RBj); 14, Spfld, 4 Dec (DB); 4, I & M Canal (La Salle Co), 28 Dec (DS). LD: 17 Jan, Clin.L (MR); 15 Jan, L&D #13 (Whiteside Co)(EW); 2 Jan, M.Arb (EW, JE). EA: 29 Jan, Sangamon Co (DB); 2 Feb (8), St. Clair Co (KM); 15 Feb at 3 no. sites—Winnebago Co (BG), Buffalo Grove (Lake Co)(DJ) & JP (PC). Local record early arrivals from several sites.

Eurasian Collared Doves. Second State Record. Carlyle Lake. 12 Feb. 1998. Photo by Dennis Oehmke.

LESSER YELLOWLEGS
14-21 Feb, Carl.L (BJo, KM).

SPOTTED SANDPIPER
27 Dec-31 Jan, Randolph Co (*TD).

LEAST SANDPIPER
2 Jan, Hidden L FP (Du Page Co)(UG,*MM).

Common Snipe
MC: 13, Carl.L, 22 Dec (KM). LD: 24 Jan, Lockport Prairie (Will Co)(MM, JMd); 8 Jan (3), LChau (RBj); 3 Jan (2), L DePue (Bureau Co)(DS, C&JMc).

American Woodcock
EA: 10 Feb, Spfld (DB); 18 Feb, Charleston (Coles Co)(JW); 28 Feb (8), Orland Park (Cook Co)(WS).

FRANKLIN'S GULL
2 Jan (ad. in **breeding plumage**), Wilmette (*EW, JE, m.ob., ph.). See seasonal highlights in this issue for details.

Bonaparte's Gull
MC: 250+, CONWR, 17 Jan (RD—wintered); 200, Spfld, 21 Dec (DB); 31, Evanston, 10 Dec (EW); 13, Wilmette, 10 Jan (JE).

Ring-billed Gull
MC: 6,000, Spfld, 24 Feb (DB); 5,500, HL, 17 Jan (KM); 600+, Wilmette (EW); 400, JP, 24 Feb (PC); 116, Astoria (Fulton Co), 15 Feb (LH).

CALIFORNIA GULL
8 Feb (ad.), Montrose (*GW, BH). A report from 18-19 Jan was undocumented.

Herring Gull
MC: 4,425, LCal, 23 Feb (DFS); 2,500, LCal, 27 Dec (WM); 820, Wauk, 13 Jan (EW); 325, HL, 19 Jan (KM); 100, Spfld, 18 Jan (DB).

Thayer's Gull
MC: 6, LCal, 19 Jan (JL); 4 (ad.), LCal, 10 Jan (GW); 2 (1st & 2nd wint.), HL, 18 Jan (DK, MD); 2 (1st wint.), Madison Co, 18 Jan (FH). Others: 11 Dec (ad.), Evanston (EW); 27 Dec (ad.), Wilmette (EW, JE); 10 Jan, Lake Co (SH); 13 Jan (ad.), Winthrop Harbor (Lake Co)(EW); 16 Jan (ad.), Wauk (DW); 17 Jan & 1 Feb, Clin.L (RC); 2 & 27 Feb (1st wint.), GrantP (DFS); 21 Feb (2), Mallard L FP (Du Page Co)(RFi, KFi); 28 Feb (ad.), IBSP (JMd).

Iceland Gull
MC: 2 ad., LCal, 10 Jan (GW); 2 (ad. Kumlien's), LCal, 10 Jan (WM, JSi); 2 (1st wint.), LCal, 23 Jan (DFS). Others: 2 Jan (ad. Kumlien's), Wilmette (EW); 17 Jan (1st wint.), Wauk (DFS); 18 Jan (1st wint.), HL (DK, MD); 18 Jan (ad.), Starved Rock L&D (La Salle Co)(C&JMc); 19 Jan (1st wint. Kumlien's), Tazewell Co (RC); 20 Jan (ad.), Madison Co (FH); 6 Feb (1st wint.), Montrose (CFs).

Lesser Black-backed Gull
MC: 2 (ad. & 3rd wint.), Montrose—wintered in area (AS et al); 2, HL, 17 Jan (KM). Others: 27 Dec (ad.), LCal (WM); 4 Jan (ad.), Decatur (Macon Co)(MD); 11 Jan (ad.), Carl.L (DK); 19 Jan (ad. or 3rd wint.), Peoria (RC); 20 Jan (1st wint.), Wolf L (Cook Co)(DFS); 12 Feb (3rd wint.), GrantP (DFS); 18 Feb (ad.), Spfld (DB).

Glaucous Gull
MC: 3 (ad., 3rd & 2nd wint.), LCal, 23 Jan (DFS); 2 (1st wint.), HL, 17 Jan (KM); 2 (ad., 1st wint.), HL, 18 Jan (DK, MD). Others: 11 Dec (1st wint.), Evanston (EW); 13 Dec-period, Mallard L FP (Du Page Co)(RFi, KFi); 27 Dec, GLPSP (JM); 13 Jan (ad.), Winthrop Harbor (Lake Co)(EW); 16 Jan (ad), Wauk (DW); 17 Jan (1st wint.), Wauk (DFS); 17-18 Jan (2nd wint.), Starved Rock L&D (La Salle Co)(C&JMc); 25 Jan (2nd wint.), Decatur (Macon Co)(MD); 1 Feb, Winthrop Harbor (Lake Co)(SH, AS); 7 Feb (2nd wint.), Winthrop Harbor (Lake Co)(JMd); 8-28 Feb (1st wint.), Carl.L (DK, RKo).

Great Black-backed Gull
MC: 4 (2 ad., 1st & 3rd wint.), LCal, date? (DFS); 3, JP, 6 Dec (RM fide RB); 2 (1st wint.), LCal, date? (AS); 2 (ad, imm.), **Rock Falls** (Whiteside Co), 23 Dec—with one ad. still present on 15 Jan (DW, EW). Others: 17 Jan (1st wint.), HL (KM); 1-18 Jan (1st wint.), Wilmette (EW); 31 Jan (ad.), LCal (MHa, WM); 7 Feb (2nd win.), Wauk (JMd).

Black-legged Kittiwake
8 Jan, **LChau** (*RBj, SC).

EURASIAN COLLARED-DOVE
2, Carl.L, 22 Dec-21 Feb (*DB, KM, *m.ob., ph.)—first accepted state record, but several previous reports. The status of this recent U.S. colonizer vs. the very similar Ringed Turtle-Dove kept by pigeon fanciers has yet to be worked out for Illinois. See the Fourth Report of the Illinois Ornithological Records Committee (*Meadowlark* Vol 7, No. 2: 58) and a future article in *Meadowlark*.

Mourning Dove
MC: 350, Spfld, 9 Dec (DB); 350, St. Clair Co, 17 Dec (KM); 150, Joliet, 20 Dec (JM); 82, Bushnell (McDonough Co), 3 Jan (LH); 53, West Frankfort (Franklin Co), 5 Feb (LSt).

Eastern Screech-Owl
MC: 7, Spfld, 21 Dec (DB); 2, Carl.L, 22 Dec (KM).

Great Horned Owl
MC: 13, Spfld, 21 Dec (DB); 5, Bushnell (McDonough Co), 3 Jan (LH).

Snowy Owl
MC: 3, Navy Pier, Chi, 2 Dec (RH); 5 sightings in period, LCal (JL). Others: 5 Dec, Woodstock (McHenry Co)(DF); 17, 23 & 27 Dec, Montrose (JPu); 21 Dec, **La Salle Co** (C&JMc); 4-13 Jan, Wauk (AS, DJ).

Barred Owl
MC: 4, Allerton Park (Piatt Co), 13 Dec (KM); 3, Spfld, 29 Jan (DB); 2 wintered, Vermilion Co (JOS).

Long-eared Owl
MC: 7, sw. Franklin Co, 18 Jan (LSt); 6, Fermi, 19 Feb (RFi, KFi); 5, so. Cook Co, 4 Jan (WS, CT); 5, Carl.L, 1-21 Feb (DK); 4, Homer L (Champaign Co), 5 Dec (JW, EK, JHn); 3, Sangchris L SP (Sangamon Co), 23 Feb (DB); 2, so. Cook Co, 7 Dec (AS); 2, MFWA, 1 Jan (RC); 2, Winnebago Co, 3 Jan (RMs). Others: 6 & 13 Dec, Lyons Woods (Lake Co)(AS, JMd); 20 Dec, Rend L (KM); 28 Dec, Roscoe (Winnebago Co)(ABo); 31 Jan, LCal (JL); 1 Feb, Montrose (JPu)—1st midwinter record for site; 14 Feb, LChau (RC).

Pileated Woodpecker. Ryerson Conservation Area. Lake Co. 21 Feb. 1998. Photo by Eric Walters. Note: Eric has been trying to get this bird on his Lake County list for a long time, and finally succeeded!

Short-eared Owl
MC: 44, PRSNA, 17 Jan (JW). Others: 2 wintered, Glenview Naval Air Station (Cook Co)(m.ob.); 7 Dec & 1 Jan (3), La Salle Co (C&JMc); 13 Dec, IBSP (AS); 1 Jan, MFWA (RC); 10 Jan, Meigs Field, Chi (DW); 19 Jan, Springbrook Prairie FP (Du Page Co)(MM); 25 Jan, Will Co (RC); 13 Feb (2), HL (KM); 28 Feb, Lake Co (JSw).

Northern Saw-whet Owl
MC: 2, Hazlett SP (Clinton Co), 12-28 Feb (DK). Others: 16-20 Dec, M.Arb (RW, EW); 1 Jan, MFWA (SB, MW); 29 Jan, Rockford (DW); 11 Feb, **Carbondale** (Jackson Co)(VL).

Belted Kingfisher
MC: 4, Spfld, 1 Jan (DB); 4, LCal, 21 Feb (JL); 3, Will Co, 20 & 27 Dec (JM). Scattered reports of singles throughout winter, including no. counties.

Red-headed Woodpecker
Records away from so. Illinois strongholds: 14 Dec (2), Bushnell (McDonough Co)(LH); 17 Dec, Columbia Woods, Palos (RFi, KFi); 21 Dec (2), Spfld (DB); 10 Jan, Starved Rock SP (La Salle Co)(C&JMc); 24 Jan, Buffalo Rock SP (La Salle Co)(DS); 25 Jan, Thatcher Woods FP (Cook Co)(DFS); 13 Feb (pair), Highland Park (Lake Co)(CFs).

Red-bellied Woodpecker
MC: 20, Spfld, 31 Jan (DB); 12, Carl.L, 22 Dec (KM); 8, Thatcher Woods FP (Cook Co), 25 Jan (DFS).

Yellow-bellied Sapsucker
Few reports. Dec (2), Spfld (DB); 6 Dec, Champaign Co (JOS); 7 Dec, Urbana (RC); 1 Jan, St. Mary's Seminary (Lake Co)(AS); 11 Jan, M.Arb (AS).

Downy Woodpecker
MC: 28, I & M Canal (La Salle Co), 28 Dec (DS); 17, Spfld, 10 Jan (DB); 17, Rend L, 20 Dec (KM); 13, Illinois R valley in Will & Grundy Cos (Joliet to Morris), 31 Jan (DFS); 7, JP, 25 Dec (PC).

Hairy Woodpecker
Few reports. 6, Spfld, 31 Jan (DB); 6, Carl.L, 22 Dec (KM); 4, Thatcher Woods FP (Cook Co), 25 Jan (DFS); pair, DeerG, 18 Dec (CFs).

Northern Flicker
MC: 15, Spfld, 7 Dec (DB), MidewinPr, 29 Jan (DFS); 6, Lyons Woods (Lake Co), 15 Jan-end of period (SH); 2, Rockford, 3 Jan (DW); 2 wintered, Greene Valley FP (DuPage Co)(JMd).

Pileated Woodpecker
Records away from so. Illinois: MC: 5, Spfld, 31 Jan (DB). Others: 14 Dec, Adair (Fulton Co)(LH); 16 Dec, Vermilion Co (JOS); 2 Jan, Columbia Woods, Palos (RFi, KFi); 14 Jan, MsPal (EW); 15-21 Feb (male), Ryerson CA (Lake Co)(SH, EW, ph.); period, Severson FP (Winnebago Co)(DW).

Eastern Phoebe
LD: **3 Jan**, HLCA (fide VK); 14 Dec (2), Spfld (DB). Other: 2 Feb, Oakwood Bottoms (Jackson Co)(KM)—likely wintered.

Loggerhead Shrike
MC: **8**, PRSNA, 17 Jan (JW, EK). Others: 8 Dec, Carbondale (Jackson Co)(KM); 10 Jan, **Mason Co** (MD); 19 Jan, Carl.L (KM); 2 Feb, St. Clair Co (KM).

Northern Shrike
Dec-21 Feb, Winnebago Co (BG, DW); 6 Dec, IBSP (AS); 12 Dec, Seward (Winnebago Co)(DW); 27 Dec, Braidwood (Will Co)(JM); 27 Dec, Winthrop Harbor (Lake Co)(m.ob.); 1 Jan, Lockport Prairie (Will Co)(CA); 10 Jan & 21 Feb, **Spfld** (DB); 11 Jan, **MFWA** (RC).

Blue Jay
MC: 52, Rend L, 20 Dec (KM); 40, Spfld, 17 Jan (DB).

American Crow
MC: 6,500, Elgin (Kane Co), 22 Dec (LH); 1,750, Evanston, 27 Dec (EW, JE); 1,500, Northern Illinois University campus (DeKalb Co), 21 Feb (SH); 1,000, St. Clair Co, 17 Jan (KM); 500, Spfld, 27 Jan (DB); 200, Bushnell (McDonough Co), 20 Dec (LH).

Horned Lark
MC: 300, Carl.L, 22 Dec (KM); 150, Will Co, 1 Jan (DFS); 110, Spfld, 31 Dec (DB). EA: 14 Feb (2), Chi (JL).

Tree Swallow
EA: 28 Feb (3), Mermet L (Massac Co)(KM).

Black-capped Chickadee
MC: 72, M.Arb, 1 Jan (DFS); 29, Spfld, 31 Jan (DB). Low numbers (maximum 11) reported elsewhere.

Tufted Titmouse
MC: 38, Spfld, 31 Jan (DB); 18, Carl.L, 22 Dec (KM); 13, Palos, 21 Dec (CT). Others: 20 Jan (3), Green L FP (Cook Co)(DFS).

Red-breasted Nuthatch
MC: 30, SRSF, 19 Jan (RC); 13, Gladstone L (Henderson Co), 14 Jan (AR); 10, Spfld, 2 Dec (DB); 8, M.Arb, 25 Dec (EW). Others: 2-3 in period, MVSP (MR); 2 wintering, Vermilion Co (JOS); 2 wintering, Champaign Co (JOS); 2 wintering, West Frankfort (Franklin Co)(LSt); 7 Dec-20 Jan, Palatine (Cook Co)(CFs); 31 Dec (2), Bushnell (McDonough Co)(LH); 10 Jan, Shabbona L SP (DeKalb Co)(DS); 24 Jan, Starved Rock SP (La Salle Co)(DS); 8 Feb, Ottawa (La Salle Co)(C&JMc).

White-breasted Nuthatch
MC: 14, Spfld, 31 Jan (DB); 7, DeerG, 30 Jan (CFs).

Brown Creeper
MC: 11, Des Plaines R (Cook Co), 21 Dec (DFS); 11, Wilmington (Will Co), 27 Dec (CA); 7, Spfld, 23 Dec (DB); 6, Franklin Creek SP (Lee Co), 1 Feb (DS); 2, JP, 18 Dec (PC); 2, Bushnell (McDonough Co), 3 Jan (LH).

Carolina Wren
MC: 13, Spfld, 31 Jan (DB). Others (no. half of state): 4 Dec (2), Vermilion Co (JOS); Dec-25 Jan, Thatcher Woods FP (Cook Co)(DFS); 26 Dec, McDonough Co (LH); 1 Jan (2), Starved Rock SP (La Salle Co)(C&JMc); 2 Jan, Grundy Co (DFS); 18 Jan, so. Cook Co (WM); 14 Feb, MVSP (MR); 22 Feb (3), I & M Canal (county?)(CT).

House Wren
MC: **10**, HLCA, 3 Jan (fide VK—record CBC high). Others: 13 Dec (2), Rend L (LSt); 23 Dec & 19 Feb, Spfld (DB).

Winter Wren
LD: 4 Dec, Vermilion Co (JOS). Others: 30 Dec, Des Plaines CA (Will Co)(JM); 1 Jan, St. Mary's Seminary (Lake Co)(AS); 3 Jan, Winnebago Co (BG); 25 Jan, Palos (RC).

SEDGE WREN
LD: **19 Dec**, Clin.L (*DB, MW, SB).

Northern Shrike. Braidwood, Will Co. 27 Dec. 1997. This bird was seen at the Morris-Wilmington Christmas Bird Count. Photo by Joe B. Milosevich.

Varied Thrush. Joliet, Will Co. 23 Dec. 1997. This bird was counted at the Joliet Christmas Bird Count. Photo by Joe B. Milosevich.

Marsh Wren
19 Dec, Clin.L (*MD); 4 Jan, UCCA (fide VK); **19 Jan**, **Lockport Prairie** (Will Co)(MM).

Golden-crowned Kinglet
MC: 6, Spfld, 31 Jan (DB); 3, Wilmington (Will Co), 27 Dec (CA). Others: 2 wintered, JP (PC); 28 Dec (2), Chi (AR); 1 Jan (2), Starved Rock Sp (La Salle Co)(C&JMc); 18 Jan (2), Zander Woods FP (Cook Co)(WM); 1 Feb, Franklin Creek SP (Lee Co)(DS); 28 Feb, Heyworth (McLean Co)(TBu).

Ruby-crowned Kinglet
MC: 45, HLCA, 3 Jan (fide VK—record number for this CBC); 7, Spfld, Dec (DB). Others: 29 Jan-5 Feb, Rockton (Winnebago Co) (DW); 27 Dec, Wilmington (Will Co)(CA); 20 Dec, Fabyan Woods FP (Kane Co)(JMd); 20 Dec, Wheaton (Du Page Co)(EW, RW, m.ob.).

Eastern Bluebird
MC: 6, Spfld, 20 Jan (DB); 6, Greene Valley FP (Du Page Co), 19 Jan (MM); 4, McDonough Co, 3 Jan (LH). Others: 12 Dec (3), Barrington (Cook Co)(CFs); 17 & 20 Dec, Woodstock (McHenry Co)(DF); 22 Dec (pair), DeerG (CFs); 27 Dec (3), Lake Forest (Lake Co)(RBa et al.); 3 Jan (2), Bureau Co (C&JMc). EA: 24 Jan, Sangamon Co (DB); 21 Feb (4), Savanna Army Depot (Jo Daviess Co)(DFS); 26 & 28 Feb (male), Montrose (JPu).

Hermit Thrush
MC: **83**, UCCA, 4 Jan (fide VK—record number for this CBC); **7**, se. Lake Co, 27 Dec (RBa et al.); 6, Spfld, 2 Dec (DB); 4, Urbana, 14 & 20 Dec (RC); 3, Rockford, 13 Dec-23 Jan (BG). Others: 23 Dec-period, Lincoln Park Zoo, Chi (JPu); 1 Jan, St. Mary's Seminary (Lake Co) (AS); 20 Jan, Lyons Woods (Lake Co)(SH); 19 Jan, M.Arb (RFi, KFi); 15-27 Jan, Wolf L (Cook Co)(DFS).

American Robin
MC: **4,500**, HLCA, 3 Jan (fide VK—record high for this CBC); 150, DeerG, 18 Dec (CFs); 70, Carl.L, 19 Jan (KM); 25, Spfld, 30 Jan (DB); 25, Palos, 21 Dec (WS); 12, JP, period (PC); 10, Thatcher Woods FP (Cook Co), 25 Jan (DFS); 10, Homer L (Champaign Co), 17 Dec (JOS).

VARIED THRUSH
22-23 Dec, Joliet (MHx, *JM, ph.).

Gray Catbird
21 Dec, **La Salle Co** (C&JMc); 23 Dec, M.Arb (UG); 23 Dec, Spfld (DB); 7 Jan-24 Feb, Lincoln Park Zoo, **Chi** (JPu); 1 Feb, **Evanston** (JPo).

Northern Mockingbird
MC: 5, Rend L, 20 Dec (KM); 4, Spfld, 13 Jan (DB); 4, Madison Co, 20 Dec (FH). Others: 3 Jan, Bushnell (McDonough Co)(LH); 24 Jan, Banner Marsh (Peoria Co)(MR); 2 wintered, MidewinPr (DFS).

Brown Thrasher
3 Dec, Spfld (DB); 20 Dec, Rend L (KM); 23 Jan, Northbrook (Cook Co)(MMr); 20 Feb, LCal (DFS).

European Starling
MC: 3,500, Madison Co, 20 Dec (FH); 920, Grundy & Will Cos, 2 Jan (DFS).

American Pipit
MC: **62**, HLCA, 3 Jan (fide VK—record high for this CBC). Others: 27 Dec, Techny (**Cook Co**)(*m.ob.)—near- record late date for no. Illinois.

Cedar Waxwing
MC: 150, Spfld, 6 Dec (DB); 112, Greene Valley FP (Du Page Co), 21 Dec (WM); 100, DeerG, 18 Dec (CFs); 50, Winthrop Harbor (Lake Co), 17 Jan (EW); 25, SRSF, 13 Dec (KM); 10+, Du Page Co, 1 Jan (RFi, KFi). LD: 6 Dec (3), JP (PC).

Immature male Dickcissel in Evanston backyard, Cook Co. The bird remained for two weeks. 18 Nov. 1997. Photo by Eric Walters.

Orange-crowned Warbler
14 Dec, Wilmette (JK); 21 Dec, Spfld (DB); 27 Dec, Wilmington (Will Co)(CA, JM); **3 Jan**, Rockford (DW); **1 Feb**, Randolph Co (*TD).

NASHVILLE WARBLER
21 Dec, Spfld (*VK).

Yellow-rumped Warbler
MC: **50**, Cherry Valley (Winnebago Co), 13 Dec (DW); **26**, Decatur (Macon Co), 20 Dec (MD); 7, Spfld, 5 Dec (DB); 5, St. Clair Co, 17 Dec (KM); 5, Palos, 18 Dec (WS); 5, Barrington (Cook Co), 12 Dec-21 Feb (CFs—birds feeding on Gray Dogwood berries); 4, Knox Co, 1 Jan (PR, AR); 3, Wheaton (Du Page Co), 20 Dec (EW, RW, m. ob.). Other: 28 Feb, Colfax (McLean Co)(MR).

Pine Warbler
Wintered in at least 4 so. Illinois locations (RD, KM).

PRAIRIE WARLBER
21 Dec, Pope Co (*MBt).

Common Yellowthroat
20 Dec, **Winnebago** Co (BG); 20 Dec, **Decatur** (Macon Co)(*MD).

WILSON'S WARBLER
16 & 23 Dec, Spfld (*DB).

YELLOW-BREASTED CHAT
28 Dec-2 Jan (eating bees), Palos (m.ob., ph.).

Spotted Towhee
22 Dec (female), **Dundee** (Kane Co)(*RM, LH)—same bird as last year; 27 Dec-24 Jan (female), **LChau/Banner Marsh** (Peoria Co)(DB, MR, TBu).

Eastern Towhee
MC: 5, Rend L, 20 Dec (KM). Other (no. 1L): 9 Nov-26 Dec (at feeder), Evanston (EW, m.ob.).

American Tree Sparrow
MC: 500+, Urbana, 20 Dec-22 Feb (RC); 400, PRSNA, 23 Dec (JW); 270, Spfld, 18 Jan (DB); 250, LCal, 23 Jan (DFS); 240, La Salle Co, 14 Dec (C&JMc); 200+, Heyworth (McLean Co), wintered (TBu, MFr); 200, Joliet area, 20 Dec (JM); 100+, se. Jo Daviess Co, 15 Jan (EW); 87, LCal, 27 Dec (WM); 85, HL, 25 Jan (KM); 78, Madison Co, 20 Dec (FH).

Chipping Sparrow
7 Dec, **Urbana** (DR, TR); 3 Jan, near HLCA (fide VK); 23 Feb, **La Salle Co** (*JH); 25 Feb, St Clair Co (KM).

Field Sparrow
20 Dec (2), Henderson Co (PR, AR); 1 Jan, M.Arb (DFS); 3 Jan, near Kishwaukee R (Ogle Co)(BG); 10 & 16 Jan, Spfld (DB); 15 Jan-6 Feb, Severson Dells FP (Winnebago Co)(DW).

Vesper Sparrow
4, sw. Franklin Co, 1 Jan (LSt).

Savannah Sparrow
MC: **30**, PRSNA, 23 Dec (JW). Others: 20 Dec (2), Urbana (RC); 22 Dec (3), Carl.L (KM); 23 Jan, **LCal** (JL); 27 Jan, **Montrose** (JPu).

Le Conte's Sparrow
22 Dec (2), Carl.L (DK, KM); 23 Dec, PRSNA (JW); 30 Dec, Franklin Co (LSt).

Fox Sparrow
MC: 10, Spfld, 23 Dec (DB). Others: 22 Dec (2), Carl.L (KM); 28-29 Dec (at feeder), Rockford (DW); 13 Jan, Evanston (JE).

Song Sparrow
MC: 100+, sw. Franklin Co, 1 Feb (LSt); 43, Carl.L, 22 Dec (KM); 25, Madison Co, 20 Dec (FH); 23, Spfld, 14 Dec (DB). Others: 1st successful overwinter, JP (PC); 21 Jan, Bushnell (McDonough Co)(LH).

Lincoln's Sparrow
27 Dec, **Wilmington** (Will Co)(CA); 21 Jan (probably wintered), Jackson Co (RD).

Swamp Sparrow
MC: 100, Carl.L, 22 Dec (KM); 5, Spfld, 17 & 23 Dec (DB); 3, Bushnell (McDonough Co), 28 Dec (LH). Others: 2 wintered, GrantP (DFS); 1 Jan, Colfax (McLean Co)(MR); 17 & 20 Jan, Lincoln Park Zoo, Chi (JPu); 24 Jan, Lockport Prairie (Will Co)(JMd).

White-throated Sparrow
MC: **1500**, HLCA, 3 Jan (fide VK—record high for this CBC); 35, Spfld, 1 Jan (DB); 18, Madison Co, 20 Dec (FH); 15 wintered, Barrington (Cook Co)(CFs); 7 wintered, GrantP (DFS); 5, Elgin (Kane Co), 22 Dec (LH); 3, CBG, 3 Jan (JMd); 2, Joliet, 20 Dec (JM).

Harris's Sparrow
LD: 6 Dec (imm.), **Urbana** (RC).

White-crowned Sparrow
MC: 65, PRSNA, 28 Dec (JW, EK); **50**, MidewinPr, 29 Jan (DFS); 40, Des Plaines CA (Will Co), 30 Dec (JM); 45, Carl.L, 22 Dec

(KM); 11, Elgin (Kane Co), 6 & 22 Dec (LH); 6, Checkrow (Fulton Co), 26 Dec (LH). Others: 20 Dec (3), Joliet (CA); 27 Dec (imm.), LCal (WM); 3 Jan, CBG (JMd); 26 Jan-2 Feb, Lincoln Park Zoo, Chi (JPu); 10 Feb (4 imm.), Spfld (DB); 13 Feb (4 imm.), CBG (CFs).

Dark-eyed Junco
MC: 200+, Urbana, 6-20 Dec (RC); 167, Rend L, 20 Dec (KM); 130, Illinois R valley in Will & Grundy Cos (Joliet to Morris)(DFS); 120, Spfld, 21 Dec (DB); 100, DeerG, 18 Dec (CFs).

"Oregon Junco":
MC: 3 (2 male, 1 female), Banner Marsh (Peoria Co)(RC). Others: wintered, Colfax (McLean Co)(MR); 11 Jan, MFWA (RC); 4-10 Jan, Shabbona L SP (DeKalb Co)(DS); 1 Jan, M.Arb (DFS); 2 Dec, Sangamon Co (DB). Both "Pink-sided" and "White-winged" Juncos reported, but not documented.

Lapland Longspur
MC: **3,000**, McLean Co, 6 Dec (MR); 1,000+, Vermilion Co, 31 Dec (JOS); 1,000, Sangamon Co, 23 Jan (DB); 100's, Bolingbrook (Will Co), 24 Jan (JMd); 200, Jackson Co, 21 Jan (RD); 23, Pecatonica (Win- nebago Co), 11 Dec (DW); 10, LChau, 29 Dec (KM); 4, McHenry Co, 26 Dec (RBa); 3, LCal, 15 Dec (DFS).

Snow Bunting
MC: 200, McHenry Co, 26 Dec (RBa); 160, Ogle Co, 13 Dec (JOS); 148, La Salle Co, 11 Jan (C&JMc); 100+, Will Co, 24 Jan (JMd); 50, Pecatonica (Winnebago Co), 10 Dec (DW); 10, CNC, 23 Jan (CFs); 7, LCal, 10 Jan (AA, WM); 6, Chi (Montrose), 3 Dec (DFS); 5+, north-central DeWitt Co, 17 Jan (MR); 5, Arrowsmith (McLean Co), 7 Dec (MR); 2, Logan Co, 19 Jan (RC); 2, LChau, 19 Jan (RC).

Northern Cardinal
MC: 103, Rend L, 20 Dec (KM); 70, Spfld, 21 Dec (DB); 22, Illinois R valley in Will & Grundy Cos (Joliet to Morris), 31 Jan (DFS).

ROSE-BREASTED GROSBEAK
1 Dec (male), Charleston (Coles Co)(BH).

Indigo Bunting
30 Dec, Franklin Co (LSt); 3 Jan, near HLCA (fide VK).

DICKCISSEL
15 Nov-2 Dec (at feeder), **Evanston** (BN, *EW, ph.); 1 Feb-period, **McLean Co** (JPe, *MR).

Red-winged Blackbird
MC: **25,000** wintering, La Salle Co (C&JMc); 13,450, Rend L, 20 Dec (KM); 1,600, LCal, 27 Dec (WM); 23, Winthrop Harbor (Lake Co), 17 Jan (EW); 17, Elgin (Kane Co), 22 Dec (LH).

Eastern Meadowlark
MC: **300**, PRSNA, 17 Jan (JW); 54, Rend L, 20 Dec (KM); 27, Spfld, 19 Jan (DB); 9, Adair (McDonough Co), 14 Dec (LH).

Western Meadowlark
4 Jan, **UCCA** (VK, DB).

Rusty Blackbird
MC: 350+, CONWR, 8 Dec (KM); 200, Spfld, 24 Jan (DB); 9, MidewinPr, 13 Jan (DFS); 5, LChau, 10 Jan (MD).

Brewer's Blackbird
LD: 6 Dec, St. Clair Co (KM); 1 Dec (2 at feeder), **Vermilion Co** (JOS, ph.).

Common Grackle
MC: 40,000, Washington Co, 11 Dec (JOS); 3,000, St. Clair Co, 16 Feb (KM).

Brown-headed Cowbird
MC: 1,700, Rend L, 20 Dec (KM); 350, LCal, 27 Dec (WM); 210, Illinois R valley in Will & Grundy Cos (Joliet to Morris), 31 Jan (DFS).

PINE GROSBEAK
20 Dec (pair), Woodstock (McHenry Co)(*DF).

Purple Finch
MC: 31, Saline Co, 8 Dec (KM, JD); 16, Rockford area, 20 Dec (DW); 5, Palos, 3 Jan (JMd); 3, MsPal, 15 Jan (EW). Others: 23 Dec, Bloomington (MFr); 12 Dec, Barrington (Cook Co)(CFs).

House Finch
MC: 630, HLCA, 3 Jan (fide VK—record high for this CBC); 60, Spfld, 21 Dec (DB); 50, Barrington (Cook Co), 12 Dec (CFs); 50, Carl.L, 19 Jan (KM).

Red Crossbill
MC: 20, SRSF, period (MD); 4 (2 males, 2 females; large-headed/large-billed race), Spfld, 15 Jan (DB); 3, Klehm Arboretum (Winnebago Co), 17 Jan (BG); 2 (pair), Savanna (Carroll Co), 14 Jan (fide EW). Other: 21 Dec-18 Feb (at feeder), Champaign Co (JOS, ph.).

White-winged Crossbill
MC: **23-50**, Page Park, Rockford, 7 Dec-30 Jan (DW); **28,** M.Arb, 25 Dec (EW, ph.)—25+ still present on 2 Jan; 15, **Spfld**, 20 Jan (DB). Others: 5 Feb (4), McHenry Co backyard, (RBa); 10 & 19 Jan (male), **SRSF** (MD, RC); 21 Dec (female), Acacia Cemetary, **Chi** (AS).

Female White-winged Crossbill feeding on hemlock seeds at Morton Arboretum, DuPage Col. 25 Dec. 1997. Photo by Eric Walters.

Trumpeter Swans. Sangamon/Montgomery County. Line, IL. 20 Feb. 1998. Photo by Dennis Oehmke.

Common Redpoll
MC: 38, CBG, 28 Dec (AS); 22, Skokie (Cook Co), 27 Dec (JK). Others: 7-14 Dec (3), La Salle Co (C&JMc); 9 Dec+ (at feeder), Buffalo Grove (Cook Co)(DJ); 25 Dec (at feeder), Rockford (DW); 27 Dec (2), Grundy Co (JM); 17 Jan, Clin.L (RC); 31 Jan (3), Rockford (BG); 22 Feb, LCal (WM, RMr).

Pine Siskin
MC: 100+, Allerton Park (Piatt Co), 3 Jan (MD); 80, Du Page Co (backyard), 1 Jan (RFi, KFi); 75, Grundy Co, 27 Dec (JM); 70, Spfld, 2 Jan (DB); 50 wintered, Urbana (RC); 38, Franklin Co, 1 Dec (LSt); 31, Rend L, 20 Dec (KM); 25, Carl.L, 19 Jan (KM); 16, Elgin (Kane Co), 22 Dec (LH); 7, MsPal, 15 Jan (EW); 6 wintered, Rockford (DW); 4, Starved Rock SP (La Salle Co), 1 Jan (C&JMc); 3 wintered (at feeder), Barrington (Cook Co)(TDe, CFs).

American Goldfinch
MC: 250, Carl.L, 19 Jan (KM); 95, LCal, 23 Jan (DFS); 56, Spfld, 28 Dec (DB); 48, MsPal, 15 Jan (EW); 42, Madison Co, 20 Dec (FH).

Evening Grosbeak
5, Saline Co, 8 Dec (KM, JD); 14 Dec, Urbana (RC).

House Sparrow
MC: 200, Vermilion Co, period (JOS); 139, Evanston, 27 Dec (EW, JE).

Eurasian Tree Sparrow
MC: 79+, Browning , 15 Feb (LH); 45, Madison Co, 20 Dec (FH); 14, Spfld, 31 Jan (DB); 8, Fulton Co, 30 Dec (KM). Others: 17 Jan, **Farmer City** (DeWitt Co)(*MR).

EXOTICS/RELEASED SPECIES:

Trumpeter Swan
Wing-tagged bird in Vermilion Co, 18 Dec (JOS); 6 (4 ad, 2 imm—3 with green neck bands), Sangamon Co line, 13 Feb (DB); 9, Carl.L, 12 Feb (DK).

SPECIAL NOTE OF THANKS AND WELCOME:

Robert Danley has moved from Illinois to pursue ornithological studies in western North America. We thank him for his many years of service compiling and writing the Winter Field Notes for the State of Illinois.

We welcome a new Winter Field Notes Editor, Kelly McKay, who has 20 years of birding experience as well as field ornithology studies work with the Illinois Natural History Survey.

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Yellow-breasted Chat on a Christmas Bird Count in Illinois? You bet!
See inside for details on this Illinois CBC first.
Photo taken on 31 December 1997 by Joe B. Milosevich at the
Little Red Schoolhouse Nature Center in Cook County, Illinois.